DOCUMENT RESUME

ED 183 818 CE 024 376

TITLE	University Based Career Education. Final Report, 1977-78.
INSTITUTION	Maine Univ., Orono. Coll. of Education.
SPONS AGENCY	Office of Career Education (DHEW/OE), Washington, D.C.
PUB DATE	Dec 78
GRANT	G0077C0090
NOTE	130p.; Some pages of the appendix materials will not reproduce well due to light and broken type. For related documents see ED 132 284, ED 138 786, ED 143 814, ED 166 365-366, and ED 167 706.
EDRS PRICE	MF01/PC06 Plus Postage.
DESCRIPTORS	Attitude Change; *Career Education; *College Faculty; Community Involvement; *Curriculum Development; *Faculty Development; Fused Curriculum; Postsecondary Education; Program Effectiveness; *Program Implementation; *Workshops
IDENTIFIERS	Education Amendments 1974; Maine

ABSTRACT

A project was conducted to infuse and implement career education in a postsecondary setting based on the following objectives: (1) to demonstrate to faculty at the University of Maine at Orono the philosophy, concepts and practices of career education in post-secondary settings via a structured seminar series; (2) to develop twenty-six career education instructional units; (3) to develop a package of career education materials for training postsecondary education faculty; (4) to involve the business/industry community as consultants to the career education seminar and as reviewers of selected instructional units; and (5) to hold a regional career education conference for dissemination of project results (not held due to insufficient funding). A posttest-only-control-group design was utilized to investigate whether there were differences between the knowledge and attitudes of the participants. Three groups were tested: seminar participants, a self-study group, and a control group of non-participants. All three groups were favorably disposed toward career education but the difference was in intensity. The seminar participants had the highest mean scores on both the knowledge test and attitude survey. Overall, participants responded favorably to the conceptual model of the seminar sessions. The self-study group indicated a need for more interaction with others. The instructional units and training package were developed and reviewed. Several restraints were identified concerning the implementation of career education programs in university settings. (BM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED183818

University Based Career Education
G0077C0090

University of Maine
College of Education
Orono, Maine

BEST COPY AVAILABLE

Final Report
1977-78

DISCRIMINATION PROHIBITED

Title VI of the Civil Rights Act of 1964 states: "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under the program or activity receiving Federal financial assistance." Title IX of the Education Amendments of 1972, Public Law 92-318, states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." Therefore, career education projects supported or actively receiving financial assistance from the U.S. Department of Health, Education, and Welfare, must be operated in compliance with these laws.

The materials in this publication was prepared pursuant to a grant from the Office of Education, U.S. Department of Health, Education and Welfare. However, points of view or opinions expressed do not necessarily represent policies or positions of the Office of Education.

CE 024 376

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

University Based Career Education Project

1977-78

G0077C0090

Executive Summary

Prepared by

Charles W. Ryan, Ph.D., Director

Robert J. Drummond, Ed.D., Research Associate

John M. Sutton, Jr., Ed.D., Research Associate

College of Education

University of Maine

Orono, Maine

December, 1978

Infusing and implementing career education in the post-secondary institutions is a difficult task since institutions of higher education differ in terms of governance, faculty autonomy, clientele and mission. The purpose of the University Based Career Education Project was to develop and implement a model of career education. The project was funded over a three year period, 1975-78 as a training grant under Section 406 of the Education Amendements of 1974 (PL 93-380). In the first year a major emphasis was to implement career education in a public school setting. A shift in focus occured in the second and third year that placed major emphasis on training university staff to infuse career education in post-secondary settings.

The project during the 1977-78 year focused on the post-secondary setting and had the following five objectives for the year: 1) to demonstrate to faculty at the University of Maine at Orono the philosophy, concepts and practices of career education in post secordary settings via a structured seminar series; 2) to select from the 1976-77 seminar series eight university/college professors who would write 26 career education instructional units incorporating at least one career education element; 3) to assemble a package of career education materials that could be utilized for training post-secondary education faculty in the philosophy, concepts and practices of career education; 4) to involve representatives from the world of business, labor and industry as consultants to the career education seminar and as reviewers of selected instructional units; 5) to plan and execute a regional career education conference for dissemination of project results in May, 1978.

To demonstrate the concepts and practices of career education, a seminar series was designed by project staff which consisted of eight career education sessions and related out-of-class assignments. The purpose of the series was to provide an overview of the philosophy, concepts and practices of career

education in post secondary institutions. Such topics as the eight elements of career education, infusion strategies, implementation of career education within academic courses, course development models, self-awareness techniques, and various models, etc. were presented.

To develop career education units a team of selected faculty from UMO and Husson College were selected. These participants had participated in the program the previous year and agreed to write units focusing on career awareness, decision making, economic awareness, beginning competencies, employability skills and self-awareness.

To assemble a package of career education materials the project staff with the aid of a research assistant reviewed all project activities, guidelines, sample materials and evaluation forms for possible inclusion in this package.

To involve representatives from the world of business, labor and industry, an advisory council was selected who were willing to serve as unit reviewers, participants and evaluators in the seminar series.

The fifth objective, conducting a regional career education conference for dissemination of project results was not held because there was insufficient funding to support this endeavor.

A posttest only control group design was utilized to investigate whether there were differences between the knowledge and attitudes of the groups. Three groups were selected 1) faculty members from the College of Education, Engineering and Science and Life Science and Agriculture who participated in the eight seminars (E_1); 2) faculty members from these colleges who were in the self instructional group (E_2); and 3) a control group who did not participate in the study.

A Career Education Knowledge Test (5th revision) was administered to the three groups. There was a significant difference between the means of the three groups. The seminar participants had higher mean scores than did the self-study groups and control group. The Faculty Attitude Survey (F.A.S., McLean and Lorse,

1976) was also administered and significant differences between the three groups were obtained. The seminar group had higher mean scores on the F.A.S. than either the self-study or control groups. All three groups were favorably disposed toward career education but the difference was in intensity.

Instructional units were developed by the seminar group and the writing team from UMO and Husson College. The writing team prepared 24 units.

The third objective was to assemble a packet of career education materials. The units from the writing team and participants have been published in Career Education in Higher Education: An Infusion Model, Vol. I, II and III. A sample set of staff development materials was also developed by the project and disseminated on a national level.

Interviews were conducted by an independent unit of the University, The Social Science Research Institute, of the faculty members in the seminar series, the self-study group and members of the business and industry advisory group. The E_1 group responded positively to the conceptual model of the seminar sessions but were critical of some repetition. Members of E_1 reported that their professional role changed as a result of these sessions and their awareness of career development issues increased. In addition, E_1 reported that the information gained helped them in student advisement.

Members of the business and industrial group felt that the topics were relevant, that the seminar was helpful in renewing university ties and that they acquired new skills and new knowledge in the area of career education.

The self-study group (E_2) did not feel the approach utilized was the most effective process for learning a new concept and indicated a need for more interaction with others. It was indicated that the program helped them improve their skills in advisement and to infuse career education concepts into their work.

Analysis of the research data by the staff indicates six major restraints in implementing career education programs in university settings:

1. excessive teaching loads
2. budgetary restraints
3. pressures of inflation
4. conflict between theory and instruction on the university level and application of ethics and work in the real world
5. accreditation standards
6. bureaucratic structure

Differential missions and clientele among the various institutions of higher learning will call for a variety of career education models to be developed. The model developed at UMO presents one alternative and has been refined by the experiences of three years of operation. Interested personnel are encouraged to contact The Center for Career Education for more detailed information.

The address is: The Center for Career Education
Dr. Charles W. Ryan
104 Shibles Hall
University of Maine at Orono
Orono, ME 04469

TABLE OF CONTENTS

LIST OF TABLES iii

PARTICIPANT SUMMARY v

PROJECT NARRATIVE 1

MAJOR ACTIVITIES 3

Objective 1 (Seminar Series) 6

Objective 2 (Career Education Writing Team) 10

Objective 3 (Career Education Materials) 11

Objective 4 (Business/Industry Advisors) 11

Objective 5 (Career Education Conference) 12

EVALUATION 13

University Seminar Series 13

Interview of Seminar Series Participants 19

E_2 Responses to Interview Questionnaire 28

Career Education Unit Development 32

Post-Secondary Education Materials 34

ANTICIPATED CHANGES AND/OR PROBLEMS 35

DISSEMINATION ACTIVITIES 40

National Activities 40

State and Local Activities 42

REFERENCES 44

APPENDICES 45

A. University Based Career Education Seminar Series Schedule . . . 46

B. Suggested Unit Format 48

C. Guidelines for Career Education Self Study Group 50

D. Career Education Writing Team Members 51

E. Guidelines for the Career Education Writing Team 52

F. Role and Responsibilities of Business-Industry Advisory Panel Members 53

TABLE OF CONTENTS (continued)

G. Faculty Attitude Survey. 54

H. Evaluation of University-Based Career Education Project (Social Science Research Institute) 61

I. 1977-78 University-Based Comprehensive Career Education Project: Open-end Responses Recorded During Participant Interviews (Social Science Research Institute). 87

J. Staff Development Activities 119

LIST OF TABLES

TABLE		PAGE
1.	UMO Faculty/Staff Composition.	7
2.	Consultants and Illustrative Examples of Their Content Presentations.	8
3.	One-Way Analysis of Variance Among Experimental Group One, Experimental Group Two, and a Control Group on a Measure of Career Education Knowledge	15
4.	Means for the Career Education Knowledge Test by Group	15
5.	One-Way Analysis of Variance Among Experimental Group One, Experimental Group Two, and a Control Group on a Measure of Faculty Attitudes Toward Career Education.	17
6.	Means by Group on a Measure of Faculty Attitude Toward Career Education.	18
7.	Demographic and Background Data on University Based Career Education Seminar Series Participants.	20
8.	Interview Responses for E_2 Group	29

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

CAREER EDUCATION PROGRAM

PARTICIPANT SUMMARY

NOTE. Participants include those DIRECTLY served by the project or, in the case of most parents and persons in the business/labor/industry community, who actively assist in project implementation. "Actively assist" includes efforts such as serving as resource persons, serving on Advisory Groups, providing work experience, etc.

FORM APPROVED
OMB NO. 51-R1137

NUMBER OF PARTICIPANTS (see NOTE above) WHO ARE	RACE/ETHNICITY (all Participants including Handicapped, Gifted and Talented, and Low Income)						OF THE TOTAL (column 6) NUMBER WHO ARE			OF THE TOTAL (column 6) NUMBER WHO ARE	
	AMERICAN INDIAN OR ALASKAN NATIVE (1)	ASIAN OR PACIFIC ISLANDER (2)	BLACK/ NEGRO (3)	CAUCASIAN/ WHITE (4)	HISPANIC (5)	TOTAL (sum of columns (1) through (5)) (6)	HANDICAPPED (7)	GIFTED AND TALENTED (8)	LOW INCOME (9)	MALE (10)	FEMALE (11)
STUDENTS											
ELEMENTARY (K-6)	--	--	--	--	--	--				--	--
MIDDLE/JUNIOR HIGH (7-9)	--	--	--	--	--	--				--	--
SENIOR HIGH (10-12)	--	--	--	--	--	--				--	--
2-YEAR COLLEGE	--	--	--	--	--	--				--	--
4-YEAR COLLEGE	--	--	--	--	--	--				--	--
ADULTS (non-matriculated)	--	--	--	--	--	--				--	--
SUB-TOTAL	--	--	--	--	--	--				--	--
EDUCATIONAL PERSONNEL											
TEACHERS (Univ.)	--	--	--	51	--	51				47	4
COUNSELORS	--	--	--	--	--	--				--	--
ADMINISTRATORS Business/Industry	--	--	--	--	--	--				7	1
MEMBERS OF THE BUSINESS/ LABOR INDUSTRY COMMUNITY	--	--	--	8	--	8					
PARENTS	--	--	--	--	--	--					
OTHER (specify)	--	--	--	--	--	--					
TOTAL	--	--	--	59	--	59					

OE FORM 467, 2-75

CAREER EDUCATION PROGRAM PROJECT PERFORMANCE REPORTS		FORM APPROVED OMB No. 51-R1187
1. Project Number 554AH70033	2. Grant Number G0077C0090	3. Nature of Report __ Semi-Annual X Final
4. Project Title University Based Career Education	5. Period Covered by This Report FROM (month, day, year) 10/1/77 TO (month, day, year) 9/30/78	
6. Category of Project (as specified in 45 CFR 160d.5 and 160d.11) __Incremental __Settings X Training __Communications __State Plan		
7. Name and Address of Grantee/Assistance Contractor Institution: College of Education University of Maine at Orono Orono, ME 04473 Telephone: (207) 581-7463		

The development and implementation of career education in institutions of higher education is a formidable challenge and requires a carefully articulated effort to train faculty in career education concepts, philosophy and practices appropriate to their settings. Universities and colleges are unique institutions in relation to purposes and operational practices. The curriculum is considered a prerogative of the faculty and any changes must be carefully reviewed by a variety of governance committees. In the three year period, 1975-78 the comprehensive career education project staff has acquired maturity and insight into the process of institutional change in higher education, particularly as it relates to career education. In this final report and other support documents an analysis of the findings will be presented. It is our intent to share with other interested career education practitioners the findings, processes and applications of career education in higher education.

University of Maine at Orono

The setting for this career education effort was the University of Maine at Orono, a medium size land grant institution of 10,000 students, 500 professional faculty and 1,000 classified employees. The University of Maine (UMO) was the original land grant institution for the state and received its charter in 1865 under the provisions of the Morrill Act, 1862. Since its opening in 1868 with 12 students and two faculty members the Orono campus has grown to a multi-purpose institution with five major colleges. UMO is committed to providing public service, research and teaching to members-of-the-public and students enrolled in one of the five colleges. Administrative units of UMO include the Colleges of Arts and Sciences, Life Sciences and Agriculture, Business Administration, Education, Engineering and Science, and the Graduate School. A two year community college is administratively attached and located in Bangor, Maine.

This broad range of goals, missions and functions provides a unique setting for introducing career education. The avowed purpose of a land grant institution is to serve all of the people and to refrain from intellectual elitism that would permit only a select few to seek admission. At the same time, this broad purpose makes it difficult to reach all faculty and students. Each department within the five colleges has placed varying emphasis on teaching, research or public service. As a result, this diversity of mission leads to some difficulty in defining with precision career education in higher education. It is the purpose of this report to provide a definition, list several implementation strategies and interpret the evaluation results.

Section 9

MAJOR ACTIVITIES

Infusing and implementing career education in the post-secondary institution is a difficult task. The uniqueness of higher education institutions in terms of governance, faculty autonomy, clientele and varying missions prohibits one single definition. American colleges and universities number about 2,500 and each institution is unique. The philosophical premise of higher education implies that the pursuit of knowledge for its intrinsic value is a noble goal and it is possible that this premise serves as a restrictive value in implementing concepts that appear vocationally oriented. Career education in substance may imply to many faculty an undue reliance on career needs of students and be the antithesis of research activity. The purpose of this section is to explore several of the relevant issues related to implementing career education in institutions of higher education.

The critical issues related to implementing career education require an understanding of the university or college environment. Governance, curriculum, students, faculty and auxiliary services are the five elements that generally constitute the institutions organizational pattern. In general, the common characteristics of four-year institutions are:

1. Restricted and selective admissions based on meeting certain entrance qualifications. Admission to professional education and liberal arts is not a "carte blanch" process.

2. Educational offerings are generally offered by specialized departments, institutes and colleges. In fact, a university is generally a union of separate colleges united under the jurisdiction of a quasi-legal body charted by the state.

3. Tuition costs range from low at state supported public or municipal institutions to extremely high at private colleges.

4. The faculty is committed to research and knowledge generation for its intrinsic worth and is less concerned about utilitarian application. This assumption must be tempered by the observation that schools of education, business, engineering sciences and agriculture provide field experiences for their students to apply theoretical concepts.

5. Professional programs must receive and continue to maintain national accreditation, particularly in education, business, engineering, science and forestry.

6. Colleges and universities seek to attract clientele from a national market and to enhance what is referred to as "national visibility." Research and development grants from federal, state and private foundations are critical to this thrust.

7. Students in colleges and universities represent a mix of ages, aspirations and career interests. In addition, the multiple lifestyle needs of todays' student places pressure on central administration for alternative living arrangements, access and control of various substances (Alcohol, etc.) and some form of participation in institutional governance.

8. A rigid faculty-staff separation that places central power for curriculum control in the hands of those holding professional appointment.

The above characteristics are not meant to be inclusive and others may wish to argue the merits of those cited. Other important characteristics may be absent from this list, and would need to be included. As a result of those unique characteristics the college and university must respond to myriad pressures from state legislators, parents, alumni, friends, students and faculty for a variety of services that is often beyond their capability to deliver.

At the risk of offending some of our readers it is our opinion that curriculum relevance, assisting students with career development and providing conditions that encourage faculty creativity are the more important issues confronting higher education. The uniqueness of higher education is a

plus factor in addressing curriculum reform and providing student assistance. The freedom that exists in university settings provides opportunity for creativity that does not exist in the business-industry world. This is not to imply that opportunity for creative thinking is not available in these settings, but by their very nature higher education institutions are predicated on a knowledge generation premise and this means new theories and applications of conceptual ideas. It is possible that career education could have impacted the college or university to a greater extent if federal funding in the early 1970's had been channeled to scholars for research and development efforts in this area.

Freedom as used in the context of this chapter implies certain conditions that facilitate the nurturance of new ideas and models for testing. Illustrative freedoms in higher education are:

1. Freedom to investigate ideas, test models and suggest applications without fear of political interference.
2. Freedom to pursue knowledge in areas of inquiry that may be unpopular with various societal elements.
3. Freedom to develop, revise and test new curriculum models without securing public approval.
4. Freedom to consult with various societal sectors without undue fear of disturbing "sacred cows." The university professor enjoys a level of prestige that renders his/her opinion as expert and it requires considerable public failure to lose this confidence.
5. Freedom to be creative in an institutional setting that thrives on new knowledge. In particular, new learning models that stimulate student motivation and interest are particularly sought.
6. Freedom to challenge old shibboleths that retard intellectual growth and restrict the faculty in pursuit of knowledge.

Naturally, these freedoms demand a sense of responsibility and some loyalty on the part of faculty to institutional goals. At the same time, this freedom requires all faculty and staff to seriously examine the career education concept

in a spirit of open inquiry. Preconceived notions or stereotypes regarding the word "career" can serve to retard infusion into existing learning models.

A review of the major objectives for the university based career education project indicates the following accomplishments:

Objective 1: To demonstrate to faculty at the University of Maine at Orono the philosophy, concepts and practices of career education in post-secondary settings that assist them in revising instructional practice via a structured seminar series.

A seminar series was designed by project staff and consisted of eight career education content sessions and out-of-class assignments (See Appendix A). The UMO series consisted of eight three hour presentations and lab exercises directed by nationally recognized experts in career education. The purpose of this seminar series was to provide an overview of the philosophy, concepts and practices of career education in post-secondary institutions. The consultants, reading materials and laboratory exercises were specifically selected to assist in implementing career education from a philosophical and applied base.

Faculty participants were recruited from the College of Life Science and Agriculture, College of Engineering Sciences and College of Education. A total of 27 UMO faculty and staff responded to the announcement letter and project abstract. A total of 20 were selected to participate in the seminars (17 completed the training). Two faculty who serve as department chairmen withdrew because of heavy administrative duties and one person died during the series. The following selection criteria were established to ensure diversity among participants. The criteria were:

A. Representation from different academic subject areas.

B. Representation of different academic ranks - Professor, Associate Professor, Assistant and Instructor.

C. High student contact at the undergraduate level.

D. Diverse field/specialization in academic areas.

The following table indicates that good academic rank and field representation was achieved.

Table 1

UMO Faculty/Staff Composition

Academic Ranks Represented		Academic Areas Represented	
Full Professor	6	Educational Foundations	1
Associate Professor	6	Child Development	1
Assistant Professor	5	Microbiology	2
Instructor	3	Forest Resources	3
TOTAL	20	Civil Engineering	2
		Agricultural Resource Economics	3
		Soil Science	1
		Electrical Engineering	1
		Social Studies Education	1
		Mathematics Education	1
		Agricultural Engineering	2
		Mechanical Engineering	1
		Physical Education	1
		TOTAL	20

A total of 17 seminar participants completed the series (Experimental Group I).

The seminar series content was carefully selected as a result of experiences in the two previous project years. Analysis of evaluation data indicated that university faculty are more receptive to materials and formal lecture type presentations by speakers with impeccable credentials. As a result, selected consultants for the seminar series were required to demonstrate application of the theoretical constructs presented. The material in Table 2 provides examples of their presentations.

Table 2

Consultants and Illustrative Examples of Their Content Presentations

Consultant	Career Education Concepts
Dr. Charles W. Ryan University of Maine	- Introduction of general career education concepts - Eight elements of career education - Overview of reasons behind career education
Dr. Robert Ristau Eastern Michigan University	- Infusion strategies - Self awareness techniques - Career awareness techniques - Research ideas - Course development models - College of business role - Life skills competencies - Career education definitions and exercises
Dr. Jeffery Kleinberg Dr. Irwin Feifer Long Island Community College	- Focus on two year programs at the community college level - Implementation of career education within basic academics - Practical labs and demonstrations - Self awareness emphasis - Importance of interviewing - Definitions of career related terms
Dr. Daniel Behring Alma College	- The Alma plan and faculty involvement in career education - Students as least critical supporters of career education - Reality of student/peer evaluations - Infusion ideas - Focus on problems hindering career education - Learning by modeling
Dr. Donald Casella University of Alabama and Birmingham Southern College	- Implementating of career education within basic elements - Practical labs and demonstrations - Self awareness emphasis - Importance of career placement - Definitions of career related terms

(continued)

Table 2 (continued)

Dr. Joseph Quaranta Ohio State University	- Theoretical foundations for career development - Students as least critical supporters of career education - Reality of student/peer evaluation - Infusion ideas - Focus on problems hindering career education - Ohio State model for teachers

1977-78 Career Education Seminar Series for University Educators.

In addition to seminar participation each participant was required to deliver a complete career education infused instructional unit. A suggested model for unit format (See Appendix B) was provided each seminar member to insure consistency in structure. In general, the content of the units prepared was of a higher quality than those published in 1976-77. Several reasons account for this improvement.

A. The project staff was able to deliver improved consultant services as a result of prior experience in 1975-76 and 1976-77.

B. The review/editing process was more consistent and project designed guidelines assisted in maintaining quality control.

C. The career education resources for higher education have increased in volume and quality, thus providing extensive reference materials for the faculty.

D. The UMO faculty have a basic commitment to research and publication and this was probably a motivating factor for many.

A total of 16 units were received from the UMO E_1 group and subsequently published in Career Education in Higher Education, Vol. II.

In addition, as part of the evaluation design a group of UMO faculty were recruited to serve as Experimental Group 2. This group was provided specific instructions (See Appendix C) on how to train themselves in the career education concept. As a part of the research design the following question was

posed "Do faculty who do not participate in a formal seminar series achieve significant gains in career education content as measured by the Career Education Knowledge Inventory (Fifth Edition, 1978) as compared to faculty who complete the seminar training. A full discussion of these findings is located in the Evaluation section. The members of E_2 were selected from a total pool of 150 UMO faculty after E_1 was selected. A one day seminar in May, 1978 was the culminating event for the E_2 group.

Objective 2: To select from the 1976-77 seminar participants 8 university/college professors who will write 26 career education instructional units that incorporate at least one career education element by using the eight career education elements as reference criterion.

As a result of prior experiences in 1976-77 it was decided to assemble a select group of faculty from UMO and Husson College to serve as a unit development team. A total of eight faculty were selected from the 1976-77 participants to serve on this team (See Appendix D). The writing team was composed of five UMO and three Husson College faculty who met in October 1977 for orientation. Specific guidelines were prepared to assist the writing team in developing the units. For example: (1) Suggested Unit Format, Appendix B; (2) Writing a Unit of Instruction, Appendix E; (3) a subcontract for services; and (4) writing tips.

A total of 24 units were delivered by the agreed upon dates and subjected to the review procedures established by the staff. Each unit did meet acceptable standards and included at least one infused career education element. The writing team was instructed to focus on career awareness, decision making, economic awareness, beginning competencies, employability skills, with less emphasis on self awareness and appreciations and attitudes. The goal was 26 completed units and we received 24 as one faculty member renegotiated their contract due to a heavy teaching load. The completed units were published in Career Education in Higher Education

An Infusion Model, Vol. III, 1978.

Objective 3: To assemble a package of career education materials that could be utilized for training post-secondary education faculty in the philosophy, concepts and practices of career education.

The intent of this objective was to review, edit and select those materials developed by the project from 1975 to 1978 for national dissemination. During the period June 1, 1978 to July 30, 1978 a research assistant was employed to assist in this task. All project memos, guidelines, sample materials and evaluation forms were reviewed for possible inclusion in this package. The project reviewed all products developed and decided that the following would be most helpful in meeting the objective. The products were divided into four categories:

Category A Selection and Orientation Procedures

Category B In-Service Training Procedures

Category C Career Education Unit Development

Category D Evaluation Processes

All of the selected materials were packaged for national dissemination and three sets accompany this final report. The package was available for national dissemination in September, 1978. The contents included:

A. Career Education in Higher Education: An Infusion Model, Vol. I, II and III.

B. Career Education Development Materials

Objective 4: To involve representatives from the world of business, labor and industry as consultants to the career education seminar and to serve as a reviewer of at least one instructional unit.

The inclusion of business/industry representatives was a calculated attempt to add a reality dimension to the seminar series. After careful deliberation the staff decided to seek representatives from the following fields: (1) public service; (2) transportation; (3) education; (4) pulp and paper; (5) student personnel services; (6) banking and (7) engineering.

Representatives from these areas would complement the mix of professors and academic fields selected for the seminars. In addition, we sought prominent UMO alumni who had achieved recognition in the community. Assistance in composing a list of potential candidates was secured from the Dean of each college represented in the project. A letter explaining the project was sent to each prospective member of the business-industry advisory council (See Appendix F). All persons contacted readily agreed to serve.

An analysis of the business-industry advisory council involvement indicates that the goal of the six community representatives was achieved. In addition, the representatives completed the following tasks:

A. Reviewed one career education instructional unit using a structured reveiw form.

B. Attended regular meetings, plus at least two career education seminars.

C. Provided opinion data on the quality of at least two career education seminars.

D. Participated in two group interaction sessions with the faculty (E_1) participants to discuss career education.

E. Participated in a structured interview conducted by Social Science Research Institute to assess the overall quality of the seminar series and their participation.

Further comments on the role of B/I Advisory Councils will be found in the evaluation section. One factor that should be considered is scheduling, it may be an impediment to full involvement. Several factors did hinder full participation for several of our members. For example: (1) union contract negotiations; (2) attendance at professional association meetings and (3) local emergencies.

Objective 5: To plan and execute a regional career education conference for dissemination of project results in May, 1978.

The conference was not held due to insufficient funding to support this endeavor. Products developed by the project staff will be distributed through the Office of Career Education, ERIC and national mailing.

Section 11

EVALUATION

Evaluation plans for the project were designed to assess the impact of the four major objectives and their impact on the target populations.

Section 11 has been subdivided into four subsections: university seminar series, interview of seminar series participants, career education unit development, and post-secondary education materials. The university seminar series subsection is concerned with the gain in participant knowledge and the change in participant attitude for both the seminar participants and the self-study group. The interview subsection examines in-depth the seminar series by analyzing eight separate areas. The career education unit development subsection considers those units that were prepared by the seminar participants as well as those prepared by the writing team. The fourth subsection, post-secondary education materials, reviews the package of career education materials prepared for utilization in the training of post-secondary education faculty.

University Seminar Series

Following completion of the seminar series a posttest-only control group design was utilized for evaluation purposes. The seminar participants (N=17) made up experimental group number one. The participants in the self-study group (N=17) made up experimental group number two. The control group (N=17) was made up of faculty members from the Colleges of Education, Engineering and Science, and Life Science and Agriculture, who volunteered to participate in the testing. It was not possible to randomly select the subjects for either the experimental and control group although the population of faculty from the three colleges were randomly selected to receive letters asking them to volunteer. The members of the three groups were equivalent in terms of age, sex, education and faculty rank.

A 60 item instrument entitled the Career Education Knowledge Test (5th Edition) was given to all three groups. This test was designed by project staff specifically to measure the knowledge gained by seminar participants. It consisted of 30 multiple choice questions and 30 confidence weighted true-false questions. The instrument has been through four separate revisions. On each occasion, certain items that had appropriate discrimination and difficulty were selected from the previous instrument. These items also represented instructional objectives covered by each seminar. Content for test items was also derived from audio and video tape recordings of seminar presentations and additional items were developed from the reading materials presented to the participants.

Test items were evaluated by three members of the project staff utilizing the following criteria:

1. Does the item reflect the content of the career education seminars or the required reading materials?
2. Is each item free of sex-stereotyping and ambiguity?
3. Does each distractor fit realistically within the content of the item?

During the fifth revision, six items were eliminated, six new items were written and eight were re-written on the basis of these criteria.

All three groups (E_1, E_2, and control) took the fifth revision of the Career Education Knowledge Test. A one-way analysis of variance for three independent groups was performed. Results of the one-way analysis of variance show a significant difference among the mean scores of the three groups, $f(251) = 3.05$, $P < .05$. The results of this analysis are contained in Table 3.

Table 3

One-Way Analysis of Variance Among Experimental Group One, Experimental Group Two, and a Control Group on a Measure of Career Education Knowledge

Source of Variation	Sum of Squares	df	Mean Squares	F Ratio	P
Between Groups	229.5928	2	114.7964	3.053	0.05
Within Groups	1917.8860	51	37.6056		
Total	2147.4785	53			

Duncan's Multiple Range Test was choosen as the multiple comparison procedure to determine the differences between means. The results are contained in Table 4.

Table 4

Means for the Career Education Knowledge Test by Group

Group	N	Means
E_1	17	23.39*
E_2	17	19.22
Control	17	18.83

*P < .05

The results of this multiple comparison test indicates that those participants in the career education seminar series scored significantly higher on the Career Knowledge Test than did either of the other two groups. This gain in knowledge by the E_1 group was strikingly similiar to gains made by other groups who have attended the seminar series in past years. There are strong

indications that a seminar series of this type would have a similiar impact on other faculty groups. Furthermore, it is our hypothesis that this seminar series may have had an impact on students (graduate and undergraduate) as well as other faculty members.

The fact that there was not a significant difference between the E_2 and control group is interesting but not unexpected. There appears to be three major reasons for this. First, the motivation of the E_2 group seemed to be quite different from that of the E_1 group. The E_1 group seemed committed to making some changes in the way they were teaching and handling their advising responsibilities and saw career education as a way of assisting them. On the other hand, a majority of the E_2 group seemed more interested in the monetary rewards associated with the project rather than what this concept might do for them or their students. Second, the format that was utilized with the E_2 group created a situation where there was an almost total lack of contact between the project staff and the group members. This absence of contact appeared to hinder half of the participants and in retrospect it might have been advantageous to have scheduled a series of infrequent meetings to provide some minimal guidelines and information. It is our conclusion that without some continuing monitoring, college faculty members will not adopt and utilize career education. Third, the lack of a significant difference between the E_2 and control groups could be the result of the instrument itself. It was designed essentially to measure the content of the seminar series and in looking over the diaries and projects done by the E_2 group, it is likely that many in the group would not have encountered the same information that was presented in the seminars. In conclusion, the real impact of this experience in the E_2 group cannot be determined from this data alone, but must be analyzed in light of other data that will be presented in succeeding sections.

The Faculty Attitude Survey (Appendix G) was utilized to measure the attitude of the project participants toward career education. This instrument was developed at the University of Alabama (McLean & Loree, 1976). A complete discription of the development of this instrument is contained in the preceeding reference.

This instrument was administered to all three groups, E_1, E_2 and control. A one-way analysis of variance for three independent groups was performed. Results of the analysis show a significant difference among the mean scores of the three groups, $f(2,51) = 6.729$, $P < .003$. The results of this analysis are contained in Table 5.

Table 5

One-Way Analysis of Variance Among Experimental Group One, Experimental Group Two, and a Control Group on a Measure of Faculty Attitudes Toward Career Education

Sources of Variance	Sum of Squares	df	Mean Squares	f Ratio	P
Between Groups	3150.8190	2	1575.4094	6.729	0.0026
Within Groups	11940.5469	51	234.1284		
Total	15091.3633	53			

Duncan's Multiple Range Test was chosen as the multiple comparison procedure to determine the differences between means. The results are contained in Table 6.

Table 6

Means by Group on a Measure
of Faculty Attitude Toward Career Education

Group	N	Means
E_1	17	168.55*
E_2	17	150.50
Control	17	155.28

*P < .05

The results of this multiple comparison test indicate that the participants of the seminar series (E_1) scored signficantly higher than either the E_2 or the control group. The significant differences between the E_1 group and the other two groups indicates that the seminar series did have a favorable impact on the participants. Having been a part of a structured sequential learning experience and having been exposed to faculty members from other universities, seems to have had a very positive effect. Learning a new concept seems to occur more readily when the course content is presented in a logical and meaningful way. Faculty reacted well to the seminar presentations and the selected material in notebooks prepared for their use. Furthermore, we would suggest that this positive reaction to career education was transmitted to students having contact with these faculty members whether it be in class or through an advising program.

In discussing these results, it should be noted that all three groups were favorably disposed toward career education. It appears that faculty in general are thinking more positively about the relationship between academic studies and the world of work. It also appears that one way of capitalizing on this trend is through an in-service program such as the one associated with this project.

Appendix G contains a listing of all 40 questions in the Faculty Attitude Survey. Directly below each question are the means of each of the three groups: E_1, E_2 and control. A one way analysis of variance with Duncan's Multiple Range Test was utilized to analyze these means. A notation was made for all differences that were significant, $P < .05$.

There were 13 items where significant differences occured. In general, the E_1 group was more positive about career education and more open to including it in their courses than were either the E_2 group or the control group. Specifically the E_1 group felt that career education did not interfere with the regular academic program and in fact it served to enhance it through a combination of specialized and liberal studies. Faculty felt that institutions of higher education must address this problem and provide more opportunities for students to avail themselves of career counseling. They also felt that students need to be exposed to a wide variety of career development experiences and that these could be provided in regular academic courses and thereby increase the career options of students.

Interview of Seminar Series Participants

Past experience has validated that in-depth personnel interviews with participants has provided us controlled opportunity to secure information regarding the impact of the project. As a result, the Social Science Research Institute at the University of Maine was contracted to conduct personal interviews with the following groups:

1. Faculty members who participated in the seminar series (E_1).
2. Faculty members who participated in the self-study group (E_2).
3. Members of the business and industry advisory group.

Table 7

Demographic and Background Data on
University Based Career Education Seminar Series
Participants

CATEGORY	E_1	E_2	BUSINESS INDUSTRY ADVISORY GROUP
Sex			
Male	15	18	7
Female	2	0	1
	17	18	8
College			
Education	2	5	
Engineering	3	6	
Life Sciences and Agriculture	12	7	
	17	18	
Terminal Degree			
B.A. - B.S.	0	0	
M.A. - M.S.	1	0	
Ph.D. - Ed.D.	16	18	
	17	18	
Academic Rank			
Instructor	1	1	
Assistant	5	7	
Associate	5	8	
Professor	6	2	
Administrator	0	0	
	17	18	
Average Years Teaching Experience	13.0	11.7	
Percent of Time Spent in Teaching	94%	88%	
Percent of Time Spent in Administration	6%	12%	
Percent of Participants with Previous Experience in Career Education	47%	39%	

A combined interview questionnaire was prepared and a copy is contained in Appendix H. Each of the 158 interview questions were coded by group. The questionnaire was divided into eight separate sections:

1. Background Information -- Questions 1-5
2. Seminar Series -- Questions 6-43
3. Consultants -- Questions 44-50
4. Seminar Materials -- Questions 51-59
5. Workshop -- Questions 60-79
6. Seminar Format -- Questions 80-103
7. Motivation -- Questions 104-124
8. Unit Development and Infusion -- Questions 125-158

It was felt that by examining these areas in-depth that we could establish quite clearly the major strengths and weaknesses of the series as well elicit recommendations for similiar in-service programs for university faculty.

The interviews themselves took place in April and June 1978 and were conducted by two professional interviewers. Each interview ranged from 20 to 60 minutes, with the average interview taking 35 minutes. The interview format contained both objective and open-ended questions. Those items have all been analyzed and will be presented by the following procedure. Each of the eight sections will be reported separately, with the exception of the first section on Background Data, the other seven sections will be separated into a result summary, followed by comments from the project staff. The responses to the open-ended interview questions are summarized in Appendix I.

Background Data

The data in Table 7 contains all of the demographic and background data on the seminar participants, the self-study group and the business-industry advisory group.

The data from the interview questionnaire will be reported and discussed by participant groups beginning with the faculty who participated in the seminar series (E_1).

Seminar Series E_1

This group responded most favorably to those presentations that were well-developed and based on a sound conceptual model. They liked the format of the seminar series but were somewhat critical of the repetition that was evident in the first few presentations. They were almost unanimous in saying that they gained essential information, that the series met their professional needs, and that it was suited to the post-secondary level. A majority indicated that their attitude toward their professional role changed as a result of these sessions and were more aware of career development issues. They were almost unanimous in their positive feelings toward the series and would recommend similar programs to their colleagues.

Staff Comments. The comments of the participants were gratifying to the staff and our efforts. All 17 who completed the program were interviewed and the majority felt that it was a worthwhile experience and that it should be continued. One problem that they reported was that the concept of career education as written and presented tended to be "fuzzy" and hard to define clearly. These comments were not unique and emphasized the need for a continuing effort to redefine and clarify career education. Most participants enjoyed having the business and industry group involved and felt they contributed significantly to the overall effectiveness of the seminar series. One interesting result was that nine members of the group indicated that their perception of their professional role had changed because of the seminar series. This seems to be rather significant when you consider that professional roles are usually well defined in graduate training and resistent to change.

Having received favorable evaluation comments for the second year in a row, we have concluded that this is a viable format in which to conduct faculty in-service training.

Consultants [E1]

Overall the group seemed pleased with the seminar consultants. They would like to see them to stay longer, perhaps for two sessions. The participants like the discussions and exercises and wanted more of both and less theory. A majority felt that it would have been helpful if the consultants were more aware of the local problems and that this would have increased the effectiveness of their presentations.

Staff Comments. This year we asked all consultants to increase the amount of time spent on discussions and exercises and this did occur. Yet, it is obvious that more needs to be done in this area. The local situation is a more difficult problem as these faculty came from several different colleges within the university and even the project staff was not always aware of some of the issues in these seperate colleges. Having outside consultants come in for short periods of time seems to be a very acceptable way of handling this from both a staff and participant point of view.

Seminar Materials

All participants reported that they read the materials that were given to them during the seminar. The materials were rated helpful, easy to use and well coordinated with the sessions and that these materials will be useful to them in the future. The handouts used by the consultants were very well received and proved to be among the most popular of all the material distributed.

Staff Comments. The evaluation results indicate considerable improvement from last year, both in terms of the material used, as well as participant responses. This was especially true of consultant handouts. We had

alerted each consultant to bring appropriate materials with them as reported earlier, they were well received.

Workshop

Did not apply.

Seminar Format E1

The large majority of the group found that the following elements of the seminar format were about right or adequate:

A. Number of sessions

B. Length of sessions

C. Facilities

D. Luncheon

E. Amount of Reading

The group felt that the interval between sessions was too long and wanted to have some type of follow-up next year to expand upon the first series. In addition, group discussions, as well as a review of the units that they developed was requested.

Staff Comments. This is another area where great improvement was shown with the exception being, lack of discussion time. We were aware of this problem throughout the series but were unable to convince the consultants to move away from their lecture format. On the other hand, the changes that were made to increase the time from two to three hours and to include a luncheon after each session were very well received by the group. The luncheon seemed to be especially valuable to many participants as they were able to utilize that time to exchange ideas with other faculty, the consultant, and members of the business and industry advisory group. The problem with the extended interval between sessions was brought on by some untimely snowstorms that forced the postponement of two sessions. We believe that without those interuptions both the starting date and intervals between sessions would have

been acceptable to most faculty.

Motivation

The vast majority of participants felt that the program was accurately portrayed in the recruitment letter and the major reasons for becoming involved were:

A. Interest in the topic

B. Professional growth

C. Need for information

The E_1 group was split on the role of the stipend as eight felt it was important and nine felt it was not important. They were almost unanimous in their agreement that the amount of the stipend was about right and all but one individual said they would participate if the stipend was not offered. The participants felt strongly that the series was applicable to their job and that it did not require too much professional time commitment.

Staff Comments. The motivation to attend a faculty in-service program such as this is very complex. The stipend is an important factor and without it we feel that recruiting faculty would have been very difficult. After the faculty became involved in the process itself, other factors seem to become more important. Thus, there is no easy explanation to the motivation question other than the fact that the stipend and the interaction process seemed to be the key factors.

Unit Development and Infusion

The majority of faculty participants found it difficult to write career education units, but at the same time they stated that it was a valuable experience. They were somewhat critical that the seminar did not adequately prepare them to write this unit. Most participants had not tried out their unit but the majority indicated that they would. A total of ninety percent have taken the information from the seminar and used it in their role as

student advisors. In discussions with their colleagues, almost all faculty members had brought up this topic. All participants felt that they will have at least occasional opportunities to utilize the information they received in the seminar. A majority of the group felt that career education is valuable enough to pursue on their own after the completion of the seminar series.

Staff Comments. The major problem we did not anticipate was the difficulty the faculty had in writing their units. This could be quickly remedied by a more extensive explanation during the seminar series, additional individual help after they have begun to write and a writing exercise. It was encouraging to find so many utilizing career education ideas and concepts in other aspects of their roles.

It seemed quite obvious to us that the seminar series had a significant impact on those who participated and in turn the participants are now impacting on their students and their colleagues.

Business-Industry Advisory Group

Seminar Series

Overall the business and industry group was very favorably impressed with the seminar series. They thought that it was appropriate for post-secondary faculty and that the topics were relevant. As individuals they found the series helpful in renewing university ties and they felt they acquired new skills and gained essential information. Seven of the eight participants rated the series as good or excellent and all eight felt that the program should be continued.

Staff Comments. We were as pleased with this group and felt they added immeasurably to the success of the series. One problem we did have was that two members were not very active and missed several of the meetings due to union negotiations and business travel. In the future, this might

be alleviated by a more careful selection process whereby only those who demonstrate real commitment would be invited to attend.

Consultants

The group felt that they would like to see more time for discussion, that there was adequate balance between theory and practice and between local and outside consultants. They also would like to see more practical exercises.

Staff Comments. These are similiar to the comments of E_1 participants and reinforce the recommendations made in that section.

Seminar Materials

They were almost unanimous in agreeing that they read and found the written materials that were given to all participants to be useful.

Staff Comments. None

Workshop

Did not apply.

Seminar Format

The group was almost unanimous in their responses to these questions. They thought that the following were at about the right level:

A. Number of sessions

B. Time interval between sessions

C. Length of sessions

D. Amount of reading

E. Length of lectures

They were unanimous on the usefulness of the luncheon and the need for follow-up seminars. They, as did the E_1 participants felt a need for more discussion time.

Staff Comments. We think this speaks highly of our organization and planning of the seminar series. The format seems to be excellent with the

exception that more emphasis needs to be placed on creating additional discussion time.

Motivation

The business and industry groups were almost unanimous in their feelings that:

A. The seminar series was accurately described.

B. The topic and the series was important to them as business professionals.

C. Professional growth and the need for information were among the prime motivating factors.

D. Their firms considered the project to be important.

E. The seminar series format was applicable to them and did not require too much time.

In addition, they were strong in their belief that they belonged to this group, that they had something to offer and that they had the opportunity to have input.

Staff Comments. We felt that including a group of local business people was one of our best decisions. We believe that it was an enjoyable and enlightening professional experience for all concerned. In future seminars, a group such as this would seem to be a necessity.

E_2 Responses to Interview Questionnaire

Up to this point, we have focused our analysis on the responses rendered by the E_1 seminar participants. The data in this section provides information on the perceptions held by the E_2 participants who trained themselves in the philosophy, concepts and practices of career education. They did not participate in structured training experiences, such as the seminar series. A series of questions was developed by SSRI for the E_2 group who responded in a one-half hour interview during May, 1978, (See Appendix H). Only 27 questions were appropriate for E_2 and their responses were as follows:

Table 8

Interview Responses for E_2 Group

Interview Question		Response	
Q 29	Are you now aware of issues	Yes	57%
		No	44%
Q 31	Would you recommend program	Yes	56%
		No	40%
		DK	6%
Q 33	Well integrated body of knowledge	Yes	22%
		No	72%
		DK	6%
Q 34	Did attitude change	Positive	50%
		Unchanged	44%
		Negative	6%
Q 66	Workshop formal presentation (4 hours)	Very effective	28%
		Somewhat effective	60%
Q 67	Workshop group discussion	Very effective	50%
		Somewhat effective	22%
		Not effective	11%
Q 68	Workshop handout material	Very effective	11%
		Somewhat effective	28%
		Not effective	28%
Q 69	Workshop Video-tape presentation	Very effective	22%
		Somewhat effective	39%
		Not effective	22%
Q 70	Should other topics be covered	Yes	50%
		No	28%
Q 72	Workshop Format OK	Day-Long Convenient	50%
		2 or 3 Short Convenient	28%
Q 73	Would follow-up seminars be useful	Yes	61%
		No	22%
Q 74	Did you read monograph	Yes	94%
		No	6%
Q 75	Was monograph worthwhile	Yes	78%
		No	17%
Q 76	Did monograph give enough background	Yes	61%
		No	33%

Table 8 (cont.)

Q 77	Were materials readily available	Yes	50%
		No	6%
		DK	44%
Q 78	Was handout (guidelines) sufficient	Yes	72%
		No	17%
		DK	11%
Q 105	Program accurately described	Yes	61%
		No	22%
		DK	17%
Q 107	Interest in topic	Very important	50%
		Somewhat important	28%
		Neutral	17%
Q 108	Professional growth	Very important	17%
		Somewhat important	61%
		Neutral	6%
		Not too important	11%
		Not at all important	6%
Q 109	Need for information	Very important	6%
		Somewhat important	72%
		Neutral	11%
		Not too important	6%
		Not at all important	6%
Q 112	The stipend	Very important	11%
		Somewhat important	44%
		Neutral	17%
		Not too important	6%
		Not at all important	22%
Q 114	Stipent amount OK	Too much	22%
		About right	72%
		DK	6%
Q 115	Would participate if no stipend	Yes	83%
		No	11%
		DK	6%
Q 129	Used Unit or Tested C.E. concept	Yes	89%
		No	11%
Q 139	What C.E. concepts infused, advising role	Yes	72%
		No	28%
Q 141	Discussed C.E. with colleagues	Yes	89%
		No	11%
Q 142	Will pursue C.E. after project ends	Yes	94%
		No	6%

Note: Percentages may not equal 100 due to rounding or missing cases. Only those respondents who were in the E_2 group are reported in this Table.

From the 27 items which were responded to by the E_2 group only 14 will be interpreted. As shown in Table 8, Q 33 indicates that a non-structured training program is not the most effective process for introducing a new concept. The one-day workshop conducted for E_2 was perceived as effective in Q 66 as a means to interact and discuss issues. In particular, Q 67 indicates that the group discussion activity was particularly powerful as a vehicle for clarifying the career education concept. The video-tape presentation (Q 69) was marginally effective as a technique for introducing career education to university faculty. Overall technical quality was fair and distracted from the concepts presented by Donald Casella.

The data in items Q 107, Q 108, Q 109, Q 112, Q 114, and Q 155 indicates interest in the topic and need for information and professional growth were critical variables in attracting the members of E_2 to participate. All E_2 members were volunteers, even though there is evidence that the monetary stipend was an attractive inducement for some (See Q 112). Item Q 34 indicates that as a whole the lack of formalized training had a more negative impact on E_2 members. This lends credence to other findings that a structured seminar approach is more effective in introducing a new concept. Members of a group tend to support positive ideas, and those who are reticent generally adopt the group norm. The members of E_2 who were supportive of the career education concept had little opportunity to interact with those having a negative posture. We suspect that the one day workshop had some positive impact on those that had not made up their mind.

The global questions in Q 139, Q 141 and Q 142 are highly interrelated and suggest some positive impact on E_2. A primary reason for volunteering was to improve their skills in career advising and 72% indicated that career education concepts were infused in this activity. Also, 89% of the E_2 members

did discuss career education with other colleagues. This level of impact is evidence that career education is of interest to university faculty and indicate that people with higher levels of education tend to discuss new ideas. All members of E_2 were recipients of doctoral degrees in their field.

The data in Table 8 must be interpreted with caution due to the complex characteristics of the respondents. Motives for participation are complex and in all probability the members of E_2 volunteered for a variety of reasons. Data collected by the interview process must be viewed as honest expressions and reactions to an unstructured experience.

Career Education Unit Development

Instructional units were developed by the E_1 participants in the seminar series. In addition, a special writing team comprised of five faculty members from the University of Maine at Orono and three faculty members from Husson College wrote a total of 24 units.

Seminar Participants

As part of their contract, each seminar participant was required to write career education infused instructional units. The instructions and format for these units is contained in Appendix B.

In addition, a portion of several seminar sessions was utilized to further elaborate on those instructions. There were also a number of faculty who individually consulted with the project staff. Each unit was reviewed by project staff for:

A. Adherence to APA Publication Manual of Style.

B. Technical considerations - format, composition, visual material quality, etc.

C. Scope - infused career education concept, internal consistency, ease of integration into existing curriculum.

D. Validity of material - appropriate for intended audience, adequate reading level, and content appropriate for intended audience.

E. Unit methodology - ease of use, includes suggested material, instructional time constraints, includes evaluation procedures and use with individuals or groups.

F. Authenticity - material is realistic, was field-tested, and uses current information or concepts.

G. Viewpoint - material avoids stereotypes, deals with interpersonal relations, presents a range of values and is non-baised toward women or minorities.

H. Special consideration - appropriate for college/university courses, reasonable cost and potential for high student impact.

After initial review, each unit was returned to the author for necessary revisions. Subsequently, the project staff reviewed them for a third time and made corrections. A final step was to secure the services of a professional proofreader from the University of Maine Press to review the proposed publication. The units were published in Career Education in Higher Education: A Model for Infusion Volume II, 1978.

Writing Team

The writing team, all of whom had participated in a previous career education seminar series, were contracted to write instructional units that incorporated at least one career education element by using the eight career education elements as a reference criterion. The instructions and format for these units is contained in Appendixes B and E.

Each unit was reviewed by project staff in the same manner as explained in the previous section. In addition, units were reviewed by several of the Business-Industry adisory team as well as other members utilizing the publication, "A Systematic Approach to Evaluating Career Education Material at the Local Level." The purpose of this review was to validate the usefulness and objectivity of the materials in relation to the career education elements.

Following this series of reviews and revisions, it was read by a professional proofreader from the University of Maine Press. The units were published in Career Education in Higher Education: A Model for Infusion,

Volume III (1978).

Post-Secondary Education Materials

The project staff assembled a package of career education materials that were designed to be utilized for training post-secondary education faculty in the philosophy, concepts, and practices of career education.

The materials included in this package were reviewed by the project staff. In addition, a panel of three academic faculty members reviewed these materials.

The criteria utilized for the review were:

1. Appropriateness
   a. Audience
   b. Reading level
   c. Tone

2. Scope
   a. Rationale
   b. Content balance
   c. Consistent

3. Authenticity
   a. Accurate
   b. Up-to-date

4. Viewpoint
   a. Humanistic
   b. Women
   c. Handicapped

5. Technical Aspects
   a. Organization
   b. Clarity
   c. Color
   d. Design
   e. Packaging

6. Special Features
   a. Guides accompanying material

The package of materials was assembled and mailed in September, 1978 to the "Office of the President" of all fifty state land grant institutions in the United States. In addition, another fifty were mailed to selected career education project directors and other leaders. The State Coordinator of Career Education in Maine was provided a set for use as appropriate.

Section 12

ANTICIPATED CHANGES AND/OR PROBLEMS

The total staff effort to initiate, manage and evaluate this project was without a doubt our best effort. Recruitment and selection of participants, organization of career education materials, evaluation and administrative management were accomplished effectively. Excellent cooperation from the Office of Career Education and assigned project officers (Gerald Elbers and Prentice Echols) facilitated all efforts. Our only serious problem was caused by the severe winter storms of 1977-78 that necessitated several changes in seminar presentations. Rescheduling resolved this difficulty and the topics were presented at a later date.

It is fair to state that serious issues remain to be resolved if career education is to be implemented in post-secondary institutions. In terms of project objectives on this particular campus, we encountered no serious difficulties in implementing the project. Universities and colleges are unique institutions that will require careful analysis prior to implementation efforts at other sites.

Infusing and implementing career education in the post-secondary institution is a difficult task. The uniqueness of higher education institutions in terms of governance, faculty autonomy, clientele and varying missions prohibits one single definition. American colleges and universities number about 2,500 and each institution is unique. The philosophical premise of higher education implies that the pursuit of knowledge for its intrinsic value is a noble goal and it is possible that this premise serves as a restrictive value in implementing concepts that appear vocationally oriented. Career education in substance may imply to many faculty an undue reliance on career needs of students and be the antithesis of research activity. The purpose of this chapter is to explore several of the relevant issues related

to implementing career education in institutions of higher education.

The critical issues related to implementing career education require an understanding of the university or college environment. Governance, curriculum, student, faculty and auxillary services are the five elements that generally constitute an institution's organizational pattern. In general, the common characteristics of four-year institutions are:

1. Restricted and selective admissions based on meeting certain entrance qualifications. Admission to professional education and liberal arts is not a "carte blanch" process.

2. Educational offerings are generally offered by specialized departments, institutes and colleges. In fact, a university is generally a union of separate colleges united under the jurisdiction of a quasi-legal body charted by the state.

3. Tuition costs range from low at state supported public or municipal institutions to extremely high at private colleges.

4. The faculty is committed to research and knowledge generation for its intrinsic worth and is less concerned about utilitarian application. This assumption must be tempered by the observation that schools of education, business, engineering sciences and agriculture provide field experiences for their students to apply theoretical concepts.

5. Professional programs must receive and continue to maintain national accreditation, particularly in education, business, engineering, science and forestry.

6. Colleges and universities seek to attract clientele from a national market and to enhance what is referred to as "national visibility." Research and development grants from federal, state and private foundations are critical to this thrust.

7. Students in colleges and universities represent a mix of ages, aspirations and career interests. In addition, the multiple lifestyle needs of today's student places pressure on central administration for alternative living arrangements, access and control of various substances (alcohol, etc.) and some form of participation in institutional governance.

8. A rigid faculty-staff separation that places central power for curriculum control in the hands of those holding professional appointment.

The above characteristics are not meant to be inclusive and others may wish to argue the merits of those cited. Other important characteristics may be

absent from this list and would need to be included. As a result of those unique characteristics the college and university must respond to myriad pressures from state legislators, parents, alumni, friends, students and faculty for a variety of services that is often beyond their capability to deliver.

At the risk of offending some of our readers, it is our opinion that curriculum relevance, assisting students with career development and providing student assistance. The freedom that exists in university settings provides opportunity for creativity that does not exist in the business-industry world. This is not to imply the opportunity for creative thinking is not available in these settings, but by their very nature higher education institutions are predicated on a knowledge generation premise and this means new theories and applications of conceptual ideas. It is possible that career education could have impacted the college or university to a greater extent if federal funding in the early 1970's had been channeled to scholars for research and development efforts in this area.

Freedom as used in the context of this chapter implies certain conditions that facilitate the nurturance of new ideas and models for testing. Illustrative freedoms in higher education are:

1. Freedom to investigate ideas, test models and suggest applications without fear of political interference.

2. Freedom to pursue knowledge in areas of inquiry that may be unpopular with various societal elements.

3. Freedom to develop, revise and test new curriculum models without securing public approval.

4. Freedom to consult with various societal sectors without undue fear of disturbing "sacred cows." The university professor enjoys a level of prestige that renders his/her opinion as expert and it requires considerable public failures to lose this confidence.

5. Freedom to be creative in an institutional setting that thrives on new knowledge. In particular, new learning models that stimulate student motivation and interest are particularly sought.

6. Freedom to challenge old shibboleths that retard intellectual growth and restrict the faculty in pursuit of knowledge.

Naturally, these freedoms demand a sense of responsibility and some loyalty on the part of faculty to institutional goals. At the same time, this freedom requires all faculty and staff to seriously examine the career education concept in a spirit to open inquiry. Preconceived notions or stereotypes regarding the word "career" can serve to retard infusion into existing learning models.

In contrast to the cited freedoms there are several serious constraints that impede implementation of career education in higher education. As a result of critical observation over the last three years, we have been able to identify six major constraints that must be resolved:

1. Excessive faculty teaching loads act to restrict teaching innovation As a result of budgetary crises of the last four years central administration has resorted to leaving unfilled vacancies as a result of natural attrition. It is not uncommon to find faculty who teach 12 to 15 credit hours per semester and average about 100 advisees in addition.

2. Budgetary reductions have reduced the number of teaching assistants available to assist faculty with routine tasks associated with the teaching process. As a result, time for creative curriculum development is further reduced.

3. The pressure of inflationary economics has reduced real take home pay for faculty and resulted in the pursuit of consultancies or other forms of renumeration. Also, the opportunity to earn extra salary via teaching in continuing education, extension or summer school works to reduce faculty energy and creativity in research efforts.

4. Work in terms of ethics and acceptance as practiced in the business-industry world is not viewed as a scholarly endeavor. Discussion of work and attendant values is not viewed as a matter of high importance for inclusion by most faculty in their classrooms. The evaluation of higher education over five centuries reflected a bias that learning was for a select few and that those endeavors deemed "occupational" were not worthy of inclusion in the curriculum.

5. Accrediting societies and associations tend to be restrictive in their insistance on adherence to established professional standards. Reliance on external agencies for official sanction of new innovations, particularly in curriculum, serves as an inhibiting function. In a sense, merely meeting prescribed standards may serve more as a deterrent to experimenting with new or revised learning models.

6. Bureaucratic procedures tend to become increasingly complex as institutions attain increased size or historical chronology. Practices become accepted because it was accepted de facto over a period of time. In spite of the avowed search for truth there is considerable reliance on accepted past practices. In retrospect, established institutions of over 50 years existence may be the most difficult in which to implement career education.

These constraints are several of the more common encountered in attempting to implement career education in a medium size state university.

In sum, our efforts to implement career education in a medium size state university have met with partial success. Defining a model for career education in higher education is not possible unless the cited constraints are addressed in planning efforts. The sheer number of post-secondary institutions (circa 2,500) existing in the United States with their missions and clientele will call for a variety of models. It is difficult to posit any one approach as the "model" for interested institutions. The process used to introduce career education on the University of Maine at Orono campus may have applicability in other similiar settings. Interested higher education planners are encouraged to contact the Center for Career Education for detailed information.

Section 13

DISSEMINATION ACTIVITIES

The dissemination activities for 1977-78 are divided into two major categories, national and local.

National Activities

A. Technical reports to Office of Career Education

(1) Six month performance report, submitted April 12, 1978

(2) Special career education packet containing Volume I, II, III and miscellaneous materials to 50 land grant state universities.

B. Requests for materials:

(1) From assorted states:

Virgil Ruble Director of Career Education Ball State University Muncie, Indiana	1 Career Education Report, Vol. I, 1978
Howard G. Rosenberg Career Services Office University of Colorado Boulder, Colorado	1 Career Education Set, Vol. I, II, III, 1978
Robert Reardon Director of CCIS The Florida State University Tallahassee, Florida	1 Career Education Set, Vol. I, II, III, 1978
Gary Green Adult and Occupational Ed. Kansas State University Manhattan, Kansas	1 Career Education Report, Vol. I
Patricia Duffy Career Education Resource Cnt. Barnstable High School Hyannis, Massachusetts	1 set of Career Ed. Activities for grades K-12
William D. Goodson Career Education Brigham Young University Provo, Utah	1 Career Education Report, Vol. I and miscellaneous materials
Carol O'Donnell Internships and Career Serv. College of the Atlantic Bar Harbor, Maine	1 Career Education Report

Theodore W. Walters, S.J. Dean, College of Arts & Sci. John Carroll University Cleveland, Ohio	Miscellaneous Career Education Materials
Sarah Richardson Associate Director Project Interact - Career Education Stephens F. Austin University Nacogdoches, Texas	1 Career Education Report, Vol. I
George R. Tomberlin Chairman, Business Div. University of Maine at Augusta Augusta, Maine	1 Career Education Report, Vol. I
John. R. Hendrick Career Education Leadership Team University of Arkansas Camden, Arkansas	1 Career Education Report, Vol. I, plus miscellaneous materials
Derek Wheeler Bronx Community College Bronx, New York	1 Career Education Report, Vol. I, plus miscellaneous materials
Daniel Behring Vice President for Student Development Alma College Alma, Michigan	1 Career Education Report, Vol. I, plus miscellaneous materials
Ronald Davidoff Assistant Superintendent Revere Local School District Bath, Ohio	1 Executive Summary, 1975-76, plus miscellaneous materials
Ivey G. Anderson Consultant, Career Education Southern Berkshire Regional School Sheffield, Massachusetts	1 Executive Summary, 1975-76, 1976-77, plus miscellaneous materials
Kaye D. Kiefert Director of Career Services Human Development Center Bellevue Community College Bellevue, Washington	1 Career Education package, Vol. I, II, and III
E. Ross Cummins Professor of Education Bates College Lewiston, Maine	1 Career Education package, Vol. I, II, and III

(2) From foreign countries:

Denis Cassivi Research Associate Atlantic Institute of Ed. Nova Scotia, Canada	1 Career Education Report, Vol. I

C. Visitors

(1) Seven consultants, 1 from Ohio, 2 from Michigan, 1 from Alabama, 2 from New York

(2) Carol O'Donnell, Internships and Career Services, College of The Atlantic, April 15, 1978

(3) Prentice Echols, Project Officer, Office of Career Education, U.S. Office of Education, Washington, D.C.

D. Conference Presentations

(1) School of Education, Indiana University, June 26, 1978, Bloomington, Indiana, "Career Education and The School Counselor"

(2) College of Education, Murray State University, March 30-31, 1978, Murray, Kentucky, "Infusing Career Education on the Campus"

(3) College of Cape Breton, Sidney, Nova Scotia, January 16, 1978, "Career Education: Implementation Strategies"

(4) American Personnel and Guidance Association, March 20, 1978, Washington, D.C., "Career Education in Higher Education"

(5) American Vocational Association, December 5, 1977, Atlantic City, New Jersey, "Career Education: Grades 9-12"

(6) Canadian Manpower Services, October 28, 1977, Halifax, Nova Scotia, "Career Education and Manpower Services"

(7) District 20 In-Service Education Program, May 10-11, 1978, St. John, New Brunswick, "Career Education Grades K-12"

(8) School of Education, Northeastern University, July 28, 1978, Boston, Massachusetts, "Career Education: Linkages with School Counselors."

State and Local Activities:

A. Local Activities:

(1) Announcement series in UMO Weekly Calendar

(2) Special report series in Bangor Daily News, October 1977 through May, 1978.

(3) College of Education bulletin board photographs of seminar participants.

(4) Copies of project abstract to all faculty in the College of Education, College of Life Sciences and Agriculture and College of Engineering and Science.

B. State Activities:

(1) Service on Maine Career Education Advisory Council for development of state career education plan.

(2) Career education materials disseminated to local education agencies per requests (a total of 30).

REFERENCES

McLean, J. E. and Loree, M. R. Comprehensive Career Education In A University. University of Alabama: Institute of Higher Education Research and Services, 1976.

"A Systematic Approach to Evaluating Career Education Materials at the Local Level." Washington, D.C.: Office of Career Education, Nov., 1974.

APPENDICES

APPENDIX A

University of Maine at Orono
1977-78

University Based Career Education Seminar Series

Date	Place	Speaker	Topic
November 11, 1977	Walker rm. Memorial Union	Charles Ryan	Introduction to Career Education In Post-Secondary Institutions
January 27, 1978	Conference rm. Hilltop Dining Complex	Joseph Quaranta	"A Conceptual Model for Career Education at the University Level"
February 10, 1978	Conference rm. Hilltop Dining Complex	Robert Ristau	"Infusing Career Education Concepts into Curriculum Practices"
February 17, 1978	Conference rm. Hilltop Dining Complex	Donald Casella	"Organizing for Career Education on the Campus"
February 24, 1978	Conference rm. Hilltop Dining Complex	Charles Ryan	"Developing Career Education Instructional Units"
March 17, 1978	Conference rm. Hilltop Dining Complex	Irwin Feifer/ Jeffery Kleinberg	"Career Education Ideas for Two Year Programs and Increasing Faculty Involvement"
April 7, 1978	Conference rm. Hilltop Dining Complex	TBA	New University Programs
April 21, 1978	Conference rm. Hilltop Dining Complex	Charles Ryan/ David Nichols	Summary - A Potpourri of Activities a) Freshman Early Experience Program b) Seminar Evaluation c) Administrative Details

TIME: 9:00 - 12:00 a.m.

OVER

Speakers

Dr. Joseph J. Quaranta
Professor of Education &
Chairman, Academic Faculty of
Special Services
College of Education
The Ohio State University
Columbus, OH 43210

Dr. Jeffery Kleinberg
Assistant Dean of Student Services
and Co-Director, Post-Secondary Career
Education Project
LaGuardia Community College
Long Island City, NY 11101

Dr. Donald A. Casella
Associate Dean
Birmingham Southern College
Birmingham, AL 35204

Dr. Irwin Feifer
Director of Career Education and
Co-Director, Post-Secondary Career
Education Project
LaGuardia Community College
Long Island City, NY 11101

Dr. Robert Ristau
Professor and Head,
Department of Administrative
Services and Business Education
Eastern Michigan University
Ypsilanti, MI 48197

Dr. Charles W. Ryan
Professor and Director, University Based
Career Education Project
College of Education
University of Maine
Orono, ME 04473

APPENDIX B

Comprehensive Career Education Project

University Based Seminar Training

Suggested Unit Format

It is suggested that the following format be used as you prepare an instructional unit for publication in the Teaching Strategy Handbook. Our experience over the past three years has indicated that the following unit outline communicates to both the learner and instructor what is intended. Also, production of high quality curriculum material at minimum cost within minimal time constraints is enhanced through use of common procedures during unit refinement/development.

Unit Format

Introduction - Discuss the purpose of the instructional unit and provide a brief overview.

Unit Goal(s) - A global statement of direction, intent or long range aim.

Unit Objective(s) - A statement of instruction that is intended to produce observable or measurable student performance. One of the three conditions of a performance objective should be met:

1. What the learner must do.
2. Under what conditions and with what materials must it be done.
3. Standard of performance to be met - how will the teacher and student know that a specific standard or level of accomplishment has been attained.

Each unit goal should have at least one performance objective. Performance objectives must be stated so that their accomplishment enables the student to reach the stated intent.

Learning Activities - Specific classroom, community or campus based activities that facilitate attainment of the objectives. The content should be in topic form and generally describe the concepts, skills, understandings, and affective learnings that will be provided the learner. It is suggested that at least one learning activity be outlined for each performance objective.

Resources - Curriculum materials, lists, games, tests, resource people, field experiences, work-study stations, etc. To assist the learner in meeting unit objectives.

Evaluation - Specific techniques or procedures to assess learner achievement and/or program effectiveness.

Time Constraints - Recommended time frame for presenting the unit.

Prepared by C.W. Ryan 11/2/76

GUIDELINES FOR CAREER EDUCATION SELF STUDY GROUP

As a prelude to implementing the career education concept in higher education institutions it is imperative that faculty input be sought. It is our intent to have you respond in what ever way is appropriate to the following question, "We would like you to help your students with their career development. You are the expert, please tell us how it should be done?" Please use the following guidelines:

1. Read the monograph Applications of the Concept of Career Education in Higher Education: An Idealistic Model.

2. Instruct yourself to the level you consider necessary to understand the career education concept. This task is to be determined by you and there are no pre-established requirements.

3. Maintain a log of activities that you participate in between December 1, 1977 and May 1, 1978. For example: read a book, consult a colleague, read a journal article, etc. (See attached sheet). Please number the activities sequentially.

4. Provide evidence that you field tested a career education concept in one of your classes. A reaction statement will be sufficient and this statement should include but is not limited to the following:

   a. description of the career development activity

   b. length of time spent on each activity

   c. your reaction

   d. student reaction

   e. other evaluation techniques (optional)

In addition to the above, each member of the group will be asked to:

5. Complete two test instruments in April, 1978 (a total of 45 minutes).

6. Participate in a structured interview with a representative of the Social Science Research Institute in April, 1978.

7. Attend a one day career education seminar on campus in April or early May, 1978 (about six hours).

Developed by Charles W. Ryan and
John M. Sutton, Jr.
November 15, 1977

APPENDIX D

CAREER EDUCATION WRITING TEAM

University of Maine

James E. Hart, Ed.D.
Associate Professor of Education
325 Shibles Hall
University of Maine
Orono, ME 04473
581-7796

Constance Perry, Ed.D.
150 Shibles Hall
University of Maine
Orono, ME 04473
581-7464

Dorin Schumacher, Ph.D.
Director, Upward Bound &
Talent Search
Flagstaff Road
University of Maine
Orono, ME 04473
581-2536

Frank T. Vitro, Ph.D.
Associate Professor of Education
114 Shibles Hall
University of Maine
Orono, ME 04473
581-7463

Lenore Worcester, Ph.D.
Assistant Professor of Education
305 Shibles Hall
University of Maine
Orono, ME 04473
581-7928

John W. Butzow, Jr., Ed.D.
Associate Professor of Education
206 Shibles Hall
University of Maine
Orono, Maine 04473
581-7020

Husson College

Diana B. Beaudoin
Assistant Professor
Business Teacher Education
Husson College
Bangor, ME 04401
945-5641

David O'Gorman, Ph.D.
Associate Professor
Business Administration
Husson College
Bangor, ME 04401
945-5641

Charles M. Sullivan, Ph.D.
Professor
Business Administration
Husson College
Bangor, ME 04401
945-5641

APPENDIX E

GUIDELINES
FOR
THE CAREER EDUCATION WRITING TEAM

In preparing the career education instructional units, each writer should be cognizant of the revised definition of career education issued by the Office of Career Education on November 6, 1977. Also, the staff has agreed that focusing on the following elements would be appropriate:

	Leading to	
Self Awareness	.....	Self Identity
Career Awareness	.....	Career Identity
Economic Awareness	.....	Economic Understanding
Decision Making	.....	Career Decisions
Beginning Competency	.....	Employability Skills

As you prepare units related to the discipline of major concern to you we <u>suggest</u> the following:

1. Don't write all 4 units in the area of self awareness or career awareness. The editors feel that sufficient self awareness infused units have been generated and suggest you focus on the other elements.
2. Develop at least one unit that could be integrated within the teacher preparation program, i.e. science, English, history, mathematics, special education, secretarial science, etc.
3. Develop at least one unit that is oriented to helping students in your classes with career awareness, decision making or economic awareness. Illustrate how you bridged the career education element and the subject matter. For example, if you are dealing with the teaching of history (the Civil War), how will you tie this specific content to career awareness or decision making.
4. All units must illustrate the bridge between a career education element and the content of your unit.

UNIVERSITY OF MAINE *at Orono*

Center For Career Education
College of Education

104 Shibles Hall
Orono, Maine 04473
207/581-2431

October 25, 1977

To: Business Industry Advisory Panel Members

From: Charles W. Ryan, Project Director

Subject: Role and responsibilities as advisory committee members

We are extremely pleased that you have agreed to serve on the University Based Career Education Advisory Committee during the 1977-78 academic year. In our opinion, your contributions are most important to the success of this project and our overall goals of improving career education activities at the post secondary level. To help you understand your role, we would like to suggest the following activities for the coming year:

1. Participate in one or all of the career education seminars that are scheduled and give your reactions.

2. Review selected career educational instructional units and complete an evaluation form giving your reactions.

3. Participate as a panel member on November 11, 1977 and react to the topic as stated.

4. Participate in evaluation activities conducted by Social Science Research Institute. For example, permit them to interview you regarding your perceptions of the project.

The above activities will provide you with the opportunity to be an active participant in the project and at the same time render us assistance in improving our overall goals in working with university faculty. Other areas of suggested involvement may arise as this project progresses and we welcome ideas in addition to the above.

Sincerely yours,

Charles W. Ryan

Charles W. Ryan, Ph.D.
Project Director

CWR/rn

FACULTY ATTITUDE SURVEY[1]

This instrument is designed to receive faculty input about career development. Forty statements concerning career development are given below. Each statement was rated according to the following scale. Directly under each statement the mean score for each group is given. Significant differences are indicated where applicable.

1. Higher education must deal with the career concerns of students.

E_1	E_2	Control
4.61*	3.83	4.17

*E_1 was significantly different than E_2 $P < .05$

2. The term career is synonymous with the term job.

E_1	E_2	Control
2.61	2.55	1.83

3. In order to offer realistic exposure to work roles, career development programs should include both positive and negative elements of the world of work.

E_1	E_2	Control
4.50	4.05	4.28

4. Career development programs are of greater value when they deal with transferable talents and abilities, rather than specific job roles.

E_1	E_2	Control
4.00	3.78	4.22

5. Career development programs interfere with academic freedom.

E_1	E_2	Control
1.33*	2.17	1.89

*E_1 was significantly different than E_2 and control $P < .05$

[1]McLean, J. E. & Loree, M. R. Comprehensive Career Education in a University Evaluation. University of Alabama, Tuscoloosa, 1976.

6. If all students want is a career, they should go to a technical school.

E_1	E_2	Control
1.50	1.83	1.72

7. Career development programs will turn colleges into vocational schools.

E_1	E_2	Control
1.44	2.00	1.78

8. Career development programs are more useful when they provide exposure to a wide variety of work roles rather than any single work role.

E_1	E_2	Control
4.33	3.94	4.39*

*Control was significantly different than E_2 $P < .05$

9. In higher education, as much emphasis should be placed on applied experience as on the academic skills.

E_1	E_2	Control
3.22	3.22	3.05

10. Career development programs can enrich the quality of students' education.

E_1	E_2	Control
4.50	4.05	4.11

11. If students are talented and industrious enough they should not need career development programs.

E_1	E_2	Control
2.00	2.44	2.17

12. Higher education does not need to interject career implications into its courses since this is the job of the career placement service.

E_1	E_2	Control
1.50	1.83	1.83

13. Classes in the more traditional subjects should be isolated from the world of work.

E_1	E_2	Control
1.55	2.05	1.72

14. To fully educate students, applied experiences should be required.

E_1	E_2	Control
4.00	3.55	3.61

15. Higher education should aim at helping bring the classroom and the community closer.

E_1	E_2	Control
4.22	3.77	4.00

16. College instructors should make explicit to students whatever career implications exist in their courses.

E_1	E_2	Control
4.27*	3.55	3.67

*E_1 was significantly different from E_2 and control $P < .05$

17. Community resource people should be utilized in presenting career information to classes.

E_1	E_2	Control
4.39	3.78	3.38

*E_1 was significantly different from E_2 and Control $P<.005$

18. Career development programs can provide a new insight into academic life.

E_1	E_2	Control
4.28*	3.61	3.78

*E_1 was significanltly different from E_2 and Control $P<.05$

19. Students should have more direct experience with "the world of work" through internships in the community.

E_1	E_2	Control
4.05	3.50	3.55

20. Every student should have some career development experiences while at a university or college.

E_1	E_2	Control
4.11*	3.17	3.39

*E_1 was significantly different from E_2 and Control $P<.05$

21. An information cart should be sent around to various buildings, providing accurate and current information on careers.

E_1	E_2	Control
2.83	2.61	2.78

22. Career development programs should stress the satisfaction and meaning of work.

E_1	E_2	Control
4.11	3.72	4.05

23. Career development programs should stress the importance of increasing productivity without asking what is being produced and toward what ends.

E_1	E_2	Control
1.39*	1.89	1.611

*E_1 was significantly different from E_2 $P<.05$

24. Career development programs are not directed toward upward mobility; instead they are aimed at reducing expectations and limiting aspirations.

E_1	E_2	Control
1.72	1.78	1.94

25. Career development programs ignore mounting evidence that particular jobs in advanced capitalistic economies lack the moral qualities attributed to work generally; in fact most working is boring.

E_1	E_2	Control
1.61	2.11	2.28

26. Career development programs seek to make people satisfied with their roles in a society that distributes social goods inequitably.

E_1	E_2	Control
1.67	2.00	2.22

27. The rapidly changing job market and general economic instability will increase the pressures on post-secondary education to adapt more flexible curricula.

E_1	E_2	Control
4.11	3.44	3.72

28. The right combination of specialized and liberal studies will furnish graduates with survival skills.

E_1	E_2	Control
4.17*	3.39	3.78

*E_1 was significantly different from 2 $P<.05$

29. Occupational implications of class content provide a means of lending relevance to academic learning.

E_1	E_2	Control
4.28	3.33	4.00

30. Career development programs are a systematic attempt to increase the career options available to individuals.

E_1	E_2	Control
4.50*	3.44	3.94

*E_1 was significantly different from E_2 and Control $P<.0006$

31. The advising programs on campus should be strengthened and related to career counseling, planning, and placement.

E_1	E_2	Control
4.28	3.61	3.83

32. Career counseling and planning should become an integral part of a new student's orientation program.

E_1	E_2	Control
4.39*	3.72	4.06

*E_1 was significantly different from E_2 $P<.05$

33. Higher education should become more alert to the changing realities of the job market so that there is not an oversupply in one area and an undersupply in another.

E_1	E_2	Control
3.67	2.94	3.50

34. If the goals of career development programs are achieved, the quality of liberal arts education will suffer.

E_1	E_2	Control
1.56*	2.33	2.11

*E_1 was significantly different from E_2 $P<.05$

35. Effective career development programs at the higher education level need to help students make wise career decisions.

E_1	E_2	Control
4.28	3.61*	4.17

*E_2 was significantly different than E_1 and Control $P<.05$

36. Career development programs will turn out university students who are complacent and accepting of the economic system.

E_1	E_2	Control
1.72	2.05	1.78

37. The development of career awareness and career exploration should begin in elementary school and continue through secondary and higher education.

E_1	E_2	Control
3.78	3.61	3.89

38. There is no need for a comprehensive career development program; all that is needed is a more effective utilization of the already existing counseling and placement center.

E_1	E_2	Control
2.00	2.44	2.28

39. Career development programs ignore the fact that the employment level is dependent on the overall health of the economy and not a mismatch between job requirements and worker skills.

E_1	E_2	Control
1.94	2.50	2.50

40. Career educators do not define career development precisely, so little is known about specific programs and goals.

E_1	E_2	Control
2.00	2.67	2.83

APPENDIX H

EVALUATION OF UNIVERSITY-BASED CAREER EDUCATION PROJECT

SOCIAL SCIENCE RESEARCH INSTITUTE
Study Number 8051
Spring 1978

Group: A - Faculty Participant in Seminars
B - Business Participant in Seminars
C - Self study group

Appointment:
Time: _____

Date: _____

Place: _____

Interviewer: _____

BACKGROUND

CARD 1

STUDY #	(1-4) 8 0 5 1
RESP #	(5-6)
CARD #	(7)
TIME STARTED	(8-11)
DATE	(12-17) / /

(GROUP B - START AT Q 6)

First I'd like to ask a few questions about your background.

AC 1. How many years of teaching experience do you have? (ENTER NUMBER OF YEARS). . . . . (18-19)

AC 2. Has all your teaching been in post-secondary education?

YES	20-1 (GO TO A-4)
NO	-5 (ASK A-3)

3. How many years were not post secondary? (ENTER NUMBER OF YEARS). . . . . (21-22)

AC 4. Are you a full-time teacher, a full-time administrator, or both teacher and administrator?

FULL TIME TEACHER	23-1
FULL TIME ADMINISTRATOR	-2 (GO TO Q6)
BOTH TEACHER AND ADMINISTRATOR	-3 (ASK Q 5)

5. In percentages, how is your time divided between teaching and administration?

% TIME TEACHING. . . . . (24-25)

% TIME ADMINISTRATION. . . (26-27)

SEMINAR SERIES _____ CARD 1

ABC 6. Before the seminar series, did you have any experience or training in career education?

YES . . . . . 28-1 (ASK Q 7)
NO. . . . . -5 (GO TO Q 8)

7. What was that?

_____

_____

_____

_____ . . . . . (29-30) ____

ABC 8. Are you between the ages of. . . (CIRCLE THE CODE TO THE QUERY TO WHICH RESPONDENT ANSWERS 'YES')

20 and 29. 31-1
30 and 39. . . . . -2
40 and 49. . . . . -3
50 and 59. . . . . -4
60 or over . . . . . -5

____

(GROUP C, GO TO Q 29)

AB 9. As you know, we're interested in your evaluation of the University-based career education project seminar series. Here is a list of seminar topics (HAND R CARD 1) Could you tell me the numbers of the 2 sessions which were most useful to you?. . . . . (32) ____ (most useful)

(33) ____ (2nd most useful)
(9B)

AB 10. What made this "most useful" presentation especially effective?

_____

_____ . . (34-35) ____

CARD 1

AB 11. Which 2 sessions were the least useful? . . . . . (36) ___ (least useful) (11A)

(37) ___ (2nd least use (11B)

AB 12. In your view, what made the "least useful" presentation ineffective?

_____

_____ . . . . (38-39) ___ ___

AB 13. Which topics if any, should be deleted from future series?

_____ . . . . (40-41) ___ ___

AB 14. Are there any additional topics you feel should have been included?

_____ . . . . (42-43) ___ ___

AB 15. Was the series as a whole well suited for post-secondary educators?

YES 44-1
NO. . . . . -5
DK. . . . . -8

16. How could this be improved?

_____

_____ . . . . (45-46) ___ ___

AB 17. Did the sessions meet your needs?

YES . . . . . 47-1 (ASK Q 18)
NO. . . . . -5 (GO TO Q 19)
DK. . . . . -8 (GO TO Q 20)

___

18. What needs were best met?

_____

_____

(GO TO Q 20)

19. What needs weren't met?

_____

_____

_____

(48-49) ___ ___

(50-51) ___ ___

CARD 1

AB 20. Did your attitude toward your professional role change as a result of the sessions?

YES . . . . . 52-1 (ASK Q 21)
NO. . . . . -5
DK. . . . . -8 (GO TO 23)

21. How? _____

22. Who or what had the greatest influence? _____ (53-54) ____ (Q 21)

(55-56) ____ (Q 22)

AB 23. Did you gain essential information from the sessions?

YES . . . . . 57-1 (ASK Q 24)
NO. . . . . -5
DK. . . . . -8 (GO TO Q 25)

24. In what areas, and from whom?

Areas	Person	
_____	_____	(58-59) ____
_____	_____	(60-61) ____
_____	_____	(62-63) ____

AB 25. Did you gain any behavioral skills as a result of the workshops?

YES . . . . . 64-1 (ASK Q 26)
NO. . . . . -5
DK. . . . . -8 (GO TO Q 27)

26. What skills, and from whom?

Skills	Person	
_____	_____	(65-66) ____
_____	_____	(67-68) ____
_____	_____	(69-70) ____

CARD 2

STUDY #	(1-4)	8 0 5 1
RESP #.	(5-6)	___ ___
CARD #.	(7)	2

AB 27. Did the seminar series generate any unexpected problems or "help" for you?

YES, problems	8	-1
YES, help		-2
YES, both		-3
NO.		-5
DK.		-8

___

28. What were these problems or help?

(9-10) ___ ___

(11-12) ___ ___

(13-14) ___ ___

ABC 29. As a result of the (seminars, self study process) are you now aware of any significant issues you weren't aware of before?

YES	15	-1
NO.		-5

___

30. What are they? ___

(16-17) ___ ___

ABC 31. Would you recommend (the seminar series, the self study process) as a viable means of infusing career education in higher education?

YES	18	-1
NO.		-5 (ASK Q 32)
DK.		-8

___

CARD 2

ABC 32. Could you state your reasons?

_____

_____ . . . . . (19-20) ___ ___

ABC 33. Did the (seminar sessions, self-study process) provide you with a well-integrated body of knowledge?

YES	21-1	
NO.	-5	
DK.	-8	

___

ABC 34. Did your attitude toward career education become more positive, more negative, or stay unchanged as a result of this experience?

POSITIVE. . . .	22-1	
UNCHANGED . . .	-3	
NEGATIVE. . . .	-5	
DK.	-8	

___

34A. Why would you say you feel that way?

_____

_____ . . (23-24) ___ ___

(GROUP C: GO TO Q 63)

AB 35. Do you feel the sessions should be continued for others?

YES	25-1	(GO TO 37)
NO.	-5	(ASK Q 36)
DK.	-8	(GO TO 37)

36. Why not? _____

___

_____

_____ . . . (26-27) ___ ___

CARD 2

AB 37. Do you feel there was too much "overlap" between sessions?

YES	. 28-1
NO.	. -5
DK.	. -8

AB 38. What overall "grade" would you give the sessions, excellent, good, fair, poor, or very poor?

EXCELLENT . . .	. 29-1
GOOD.	. -2
FAIR.	. -3
POOR.	. -4
VERY POOR . . .	. -5

(GROUP B: GO TO Q 44)

A only 39. In the future should students, graduates and undergrads, be invited to the sessions as interactors?

YES, UNDERGRADS. . .	. 30-1
YES, GRADS	. -2
YES, BOTH.	. -3
NO	. -5
DK	. -8

A only 40. Did you feel that the role of participants from the business and industry community was clear?

YES	. 31-1
NO.	. -5
DK.	. -8

A only 41. How would you rate the level of involvement among the business and industry participants; would you say it was greater than, less than, or about the same as the level of involvement among faculty participants?

GREATER	. 32-1
LESS.	. -2
ABOUT SAME. . .	. -3
DK.	. -8

CONSULTANTS

CARD 2

A only 42. And how about the contribution they made to the sessions in general--greater than, less than, or about the same as faculty participants?

GREATER	. 33-1
LESS.	. -2
ABOUT SAME. . .	. -3
DK.	. -8

A only 43. In the future, should representatives of the business and labor community be included in the seminar series as participants, as speakers, as both participants and speakers, or should they not be included?

PARTICIPANTS. .	. 34-1
SPEAKERS. . . .	. -2
BOTH.	. -3
NEITHER	. -4
DK.	. -5

AB 44. Do you think it would be worthwhile to have the consultants here for a longer time, perhaps having two sessions with each?

YES	. 35-1
NO.	. -5

AB 45. Would the participants benefit from more interaction or discussion with each consultant?

YES	. 36-1
NO.	. -5

CARD 2

AB 46. Were the consultants sufficiently aware of or sensitive to local situations or problems?

YES	37-1
NO	-5

AB 47. Was the balance between theory and practical knowledge about right or was there too much emphasis on one or the other?

TOO MUCH THEORY	38-1
ABOUT RIGHT	-2
TOO MUCH PRACTICAL	-3
DK	-8

AB 48. Was it beneficial to bring in consultants or could local resource people have been used more extensively?

CONSULTANTS	39-1
LOCAL PEOPLE	-2
BOTH	-3
DK	-8

AB 49. Did the presentors generally assume you already had more knowledge, less knowledge, or about as much knowledge as you really had?

MORE	40-1
AS MUCH	-3
LESS	-5
DK	-8

AB 50. Would it have been beneficial if more time were spent on exercises and less time on formal presentations?

YES	41-1
NO	-5
DK	-8

(GROUP B GO TO 60)

SEMINAR MATERIALS

CARD 2

A only 51. Did you read the seminar notebook materials which you received at the beginning of the series?

YES . . . . . 42-1 (ASK Q 52)
NO. . . . . -5 (GO TO Q53)

52. About what percentage of the material did you read? . . . . . (43-44) ___ ___
(GO TO Q54, INSTRUCTIONS)

53. Why not? _____
_____
_____
_____ (45-46) ___ ___

A only Here are some statements (HAND R CARD 2) about the seminar materials. Would you say you strongly agree, agree, disagree, or strongly disagree with each? (READ EACH STATEMENT)

A only 54. The materials seem difficult to use.

STRONGLY AGREE. 47-1
AGREE . . . . . -2
UNDECIDED/DK . . . . . -3
DISAGREE. . . . . -4
STRONGLY DISAGREE . . . . -5

A only 55. I will probably use at least part of the materials.

STRONGLY AGREE. 48-1
AGREE . . . . . -2
UNDECIDED/DK. . . . . -3
DISAGREE. . . . . -4
STRONGLY DISAGREE . . . . -5

CARD 2

A only 56. The materials were not well coordinated with the seminar series.

STRONGLY AGREE.	. 49-1
AGREE	. -2
UNDECIDED/DK.	. -3
DISAGREE.	. -4
STRONGLY DISAGREE	. -5

A only 57. The materials were an important part of the seminar instruction.

STRONGLY AGREE.	. 50-1
AGREE	. -2
UNDECIDED/DK.	. -3
DISAGREE.	. -4
STRONGLY DISAGREE	. -5

A only 58. The consultants also handed out materials. Did these generally contribute to the presentor's effectiveness?

YES	. 51-1
NO.	. -5
DK.	. -8

A only 59. Will the consultants' hand out materials be helpful to you for future reference?

YES	. 52-1
NO.	. -5
DK.	. -8

(GROUP A GO TO Q 80)

E-1 WORKSHOP

CARD 2

B only 60. Were the seminar materials helpful in any way?

YES 53-1
NO. . . . . -5
DK. . . . . -8

B only 61. Would other materials have been more helpful?

YES . . . . . 54-1 (ASK Q 62)
NO. . . . . -5
DK. . . . . -8 (GO TO Q

62. What? _____

(55-56) ___ ___

(GROUP B GO TO Q 80)

C only 63. Did the 1 day workshop meet your needs?

YES . . . . . 57-1 (ASK Q 64)
NO. . . . . -5 (GO TO Q 65)
DK. . . . . -8 (GO TO Q 66)

64. What needs were best met?

(58-59) ___ ___

65. What needs weren't met?

(60-61) ___ ___

CARD 2, 3

C only 66. Several methods were used to present information at the workshop. Would you rate each of the following as very effective, somewhat effective, or not effective?

Formal presentation

VERY EFFECTIVE . . .	. 62-1
SOMEWHAT EFFECTIVE .	. -3
NOT EFFECTIVE. . . .	. -5

C only 67. Group discussion

VERY EFFECTIVE . . .	. 63-1
SOMEWHAT EFFECTIVE .	. -3
NOT EFFECTIVE. . . .	. -5

C only 68. Handout material

VERY EFFECTIVE . . .	. 64-1
SOMEWHAT EFFECTIVE .	. -3
NOT EFFECTIVE. . . .	. -5

C only 69. Videotape presentation

VERY EFFECTIVE . . .	. 65-1
SOMEWHAT EFFECTIVE .	. -3
NOT EFFECTIVE. . . .	. -5

STUDY #.	. (1-4)	8 0 5 1
RESP #	. (5-6)	
CARD #	. (7)	3

C only 70. Should other topics have been covered by the workshop?

YES	. 8-1	(ASK Q 71)
NO.	. -5	(GO TO Q 72)
DK.	. -8	(GO TO Q 72)

71. What other topics?

(9-10) ___

(11-12)

CARD 3

C only 72. Was the format of a single, day-long workshop convenient for you, or would 2 or 3 shorter workshops have been more convenient?

DAY-LONG CONVENIENT . . .	13-1
2 or 3 SHORT CONVENIENT .	-5
DK.	-8

C only 73. Would a series of seminars be useful to follow-up or expand on the self-study process?

YES	14-1
NO.	-5
DK.	-8

C only 74. Did you read the monograph on Career Education "Application of the concept of Career Education to Higher Education"?

YES	15-1	(ASK Q 75)
NO.	-5	(GO TO Q 77)
DK DON'T REMEMBER.	-8	(GO TO Q 77)

75. Was it worthwhile?

YES	16-1	(ASK Q 76)
NO.	-5	(ASK Q 76)
DK.	-8	(ASK Q 76)

76. Did it give you enough background to logically proceed in the self-study process?

YES	17-1
NO.	-5
DK.	-8

SEMINAR FORMAT

CARD 3

C only 77. Were materials and resources readily available in the library or from colleagues?

YES	18-1	
NO	-5	
DK	-8	

___

C only 78. Was the one-page handout "Guidelines for Career Education Self Study Group" a sufficient description of what was expected of you?

YES	19-1	(GO TO Q 104)
NO	-5	(ASK Q 79)
DK	-8	(GO TO Q 104)

79. What more was needed?

_____

_____

___

(20-21) ___ ___

(GROUP C GO TO Q 104)

AB 80. Was the number of sessions too many, too few, or about right?

TOO MANY	22-1	
TOO FEW	-2	
ABOUT RIGHT	-3	

___

81. How many more/less would you suggest?

_____

(23-24) ___ ___

CARD 3

AB 82. Were the sessions too long, too short, or about right?

TOO LONG	. 25-1
TOO SHORT.	. -2
ABOUT RIGHT.	. -3

___

83. How much longer/shorter would you suggest?

_____

(26-27) ___ ___

AB 84. How about the time interval between sessions? Too long, too short, or about right?

TOO LONG	. 28-1
TOO SHORT.	. -2
ABOUT RIGHT.	. -3

___

85. How much longer/shorter would you suggest?

_____

(29-30) ___ ___

AB 86. Would a second series of seminars be useful to follow-up or expand upon the first series for the same participants?

YES	. 31-1
NO.	. -5
DK.	. -8

___

(GROUP B GO TO Q 88)

A only 87. Would it be beneficial to start earlier in the fall and finish by the end of the first semester, so that the second semester could be used for infusion of the career education units?

YES	. 32-1
NO.	. -5
DK.	. -8

CARD 3

AB 88. Were the facilities for the seminar series adequate?

YES	. 33-1	(GO TO Q 90)
NO.	. -5	(ASK Q 89)
DK.	. -8	(GO TO Q 90)

89. What was not adequate?

_____

_____

(34-35) ___ ___

AB 90. Was the luncheon following each session beneficial?

YES	. 36-1
NO.	. -5
DK.	. -8

___

AB (HAND R CARD 3)
Here are some possible formats for workshops or seminar sessions. Would you recommend that each of these be used more, used less, or about as they were?

		(INTERVIEWER CIRCLE ANSWER)				
		use more	INAP	about right	NA, DK	]
91. Reading.	(37)	1	0	3	9	
92. Lecture presentations.	(38)	1	0	3	9	
93. Discussion with lecturers.	(39)	1	0	3	9	
94. Panel presentation & interaction with panel.	(40)	1	0	3	9	
95. Role playing and discussion.	(41)	1	0	3	9	
96. Combination of small group & large group discussion.	(42)	1	0	3	9	
97. Practical exercises during sessions.	(43)	1	0	3	9	
98. Development of career education units. . . .	(44)	1	0	3	9	
99. Discussion of units developed by participants	(45)	1	0	3	9	
100. Demonstrations	(46)	1	0	3	9	
101. Field visits	(47)	1	0	3	9	
102. Use of audio-visual materials.	(48)	1	0	3	9	
103. Case study approach.	(49)	1	0	3	9	

OTIVATION CARD 3

BC 104. Why did you decide to become involved in the Career Education project?

_____

_____

_____ . . . . (50-51) ___ ___

BC 105. Did the information you received ahead of time accurately describe the program?

YES . . . . . 52-1 (GO TO Q107, INSTR.)
NO. . . . . -5 (ASK Q 106)
DK. . . . . -8 (GO TO Q107, INSTR.)

106. How was it inaccurate?

_____

_____ . . . . . (53-54) ___ ___

ABC Now I'm going to read a list of factors which may or may not have entered into your decision to participate. Using this scale (HAND R CARD 4) please tell me the number which best describes the importance of each factor.

			Very Important				Not at all Important
ABC	107.	Interest in the topic	(55) 1	2	3	4	5
ABC	108.	Professional growth	(56) 1	2	3	4	5
ABC	109.	Need for information.	(57) 1	2	3	4	5
AB	110.	Administrative pressure	(58) 1	2	3	4	5
A only	111.	Publication of participants units	(59) 1	2	3	4	5
AC	112.	The stipend	(60) 1	2	3	4	5

ABC 113. What other factors, if any, entered into your decision to participate?

_____

_____ (61-62) ___ ___

(GROUP B GO TO Q 116)

CARD 3

AC 114. Considering the requirements for the stipend, was the amount too little, too much, or about right?

TOO LITTLE	63-1
TOO MUCH	-2
ABOUT RIGHT	-3
DK	-8

AC 115. Would you have participated if there had been no stipend?

YES	64-1
NO	-5
DK	-8

AB 116. How many sessions did you attend? . . . . . (65) ___

(GROUP A GO TO Q 118 INSTRUCTIONS)

(GROUP C GO TO Q 127)

CARD 3, 4

Some people might regard these seminars as a place for educators only; others would not. (HAND R CARD 4)

B Here are some feelings you may have personally experienced about the seminars. Would you say you strongly agree, agree, disagree, or strongly disagree with each statement?

			Strongly agree	Agree	DK	Disagree	Strongly disagree
nly	117.	My firm did not see the series as a good use of time	(65) 1	2	3	4	5	0
B	118.	I did not see the series as a good use of time	(56) 1	2	3	4	5	0
B	119.	The series was not applicable to my job . .	(67) 1	2	3	4	5	0
B	120.	At times I felt personally uncomfortable. .	(68) 1	2	3	4	5	0
B	121.	The seminars required too much time	(69) 1	2	3	4	5	0
	122.	Our group (the business-industry group) didn't have any opportunities for meaningful input.	(70) 1	2	3	4	5	0
B	123.	I didn't have anything to offer the group . (GROUP B GO TO Q 152)	(71) 1	2	3	4	5	0
nly	124.	I had administrative duties which took up my time on Friday mornings.	(72) 1	2	3	4	5	0

STUDY #	(1-4)	8 0 5 1
RESP #.	(5-6)	___ ___
CARD #.	(7)	4

nly 125. Did you find it difficult to prepare a career education related unit?

YES	. 8-1
NO.	. -5

___

UNIT DEVELOPMENT AND INFUSION

CARD 4

A only 126. How valuable an exercise was writing the unit? Was it very useful, somewhat useful, or not useful?

VERY USEFUL	9-1
SOMEWHAT USEFUL	-3
NOT USEFUL	-5
DK	-8

A only 127. How well did the seminar materials and sessions prepare you for writing the unit; very well, well, poorly, or very poorly?

VERY WELL	10-1
WELL	-2
POORLY	-3
VERY POORLY	-4
DK	-8

A only 128. Were the comments you received about your unit constructive?

YES	11-1
NO	-5
DK	-8

A only 129. Have you used the unit you developed in your courses?

C only Have you field tested a career education concept in one of your courses?

YES	12-1	(GO TO Q 129)
NO	-5	(ASK Q 130)

AC 130. Do you plan to?

YES	13-1	(GO TO Q137)
NO	-5	

AC 131. Did you consider this very successful, somewhat successful or unsuccessful?

VERY SUCCESSFUL	14-1
SOMEWHAT SUCCESSFUL	-3

CARD 4

AC 132. Did you encounter any problems in doing this?

YES . . . . . 15-1 (ASK Q 133)
NO. . . . . -5 (GO TO Q 134)

133. What were they? _____

. . . . (16-17) ___ ___

AC 134. Did your students or colleagues evaluate your use of career education?

YES . . . . . 18-1 (ASK Q 135)
NO. . . . . -5 (GO TO Q 137)

135. How was this done? _____

. . . . (19-20) ___ ___

136. What were the results? _____

. . . . (21-22) ___ ___

A only 137. Have you written any additional units?

C only Have you integrated any additional career education concepts in your courses?

YES . . . . . 23-1 (GO TO Q 139)
NO. . . . . -5 (ASK Q 138)

138. Do you plan to?

YES 24-1
NO. . . . . -5 (ASK Q 139)
DK. . . . . -8

CARD 4

AC 139. Have you infused career education concepts in your student advising role?

YES . . . . . 25-1 (ASK Q 140)
NO. . . . . -5 (GO TO Q 141)

___

140. What were they? _____

_____

_____ . . . . (26-27) ___ ___

AC 141. Have you discussed career education with your colleagues?

YES 28-1
NO. . . . . -5

___

AC 142. Do you feel that career education is valuable enough to pursue on your own after the completion of the (seminar series, self-study program)?

YES . . . . . 29-1 (ASK Q 143)
NO. . . . . -5 (GO TO Q 144)
DK. . . . . -8 (GO TO Q 144)

___

143. How do you intend to accomplish this?

_____

_____ . . . . . (30-31) ___ ___

AC 144. On a scale of 1 to 10 (one being the lowest) what priority would you give career education as a factor that needs to be addressed in terms of faculty development?. . . . . (32-33) ___ ___

CARD 4

A only 145. Have you read literature related to career education as a result of the sessions?

YES . . . . . 34-1 (ASK Q 146)
NO. . . . . -5 (GO TO Q 150)

146. What have you read?

(FIRST) _____ (35-36) ___

147. Was that helpful to you?

YES 37-1
NO. . . . . -5

148. (SECOND) _____ (38-39) ___

149. Was that helpful to you?

YES 40-1
NO. . . . . -5

AC 150. How often will you have opportunities to apply what you learned about career education, frequently, occasionally, rarely, or never?

FREQUENTLY. . . 41-1
OCCASIONALLY. . -2
RARELY. . . . . -3
NEVER . . . . . -4
DK. . . . . -8

AC 151. What ideas, materials, or skills, if any, do you use now as a result of the career education project?

_____ (42-43) ___

_____ (44-45) ___

ABC 152. In your opinion, should career education have an expanded role in higher education?

YES 46-1
NO. . . . . -5
DK. . . . . -8

THANK YOU FOR YOUR ASSISTANCE.

CARD 4

Variable Q 153. Respondent's sex

MALE.	47-1
FEMALE.	-5

Q 154. Terminal degree

BA/BS.	48-1
MA/MS.	-2
CAS.	-3
Ph.D./Ed.D	-4
BUSINESS GROUP . .	-5
OTHER.	___

spec. _____

Q 155. Professorial rank

INSTRUCTOR. . .	49-1
ASS'T	-2
ASSOC	-3
PROF.	-4
BUSINESS GROUP.	-5
OTHER	___

spec. _____

Q 156. College

LSA	50-1
ED.	-2
ENG. SCI. . . .	-3
BUSINESS GROUP.	-4

___

Q 157. Number of sessions attended. . . . . (51-52) ___ ___

Q 158. Group

A. Faculty Seminar Participant (E1)	53-1
B. Business Seminar Participant . .	-2
C. Faculty Self Study (E2)	-3

___

APPENDIX I

1977-78 UNIVERSITY-BASED COMPREHENSIVE CAREER EDUCATION PROJECT: OPEN-END RESPONSES RECORDED DURING PARTICIPANT INTERVIEWS

Social Science Research Institute
June, 1978

I. Preface

This document constitutes an enumeration of responses to "open-end" type questions which were part of the final structured interview of participants in the 1977-78 University-Based Career Education Project. The listing is designed to accompany and complement a computer print-out of frequencies of the "closed-end" type questions found in the interview schedule.

The responses to each question are stratified by group (i.e., faculty seminar participants, or E_1; faculty self-study participants, or E_2; and the Business-Industry Group) and in some cases by a second category such as "generally favorable" or "generally unfavorable."

In addition to open-ended responses, a short section of miscellaneous comments and voluntary responses has also been included.

Where a response is followed by a number in parentheses (2) it indicates that that response was given more than once.

Efforts have been made to assure that responses presented here are as close as possible to the respondent's actual words, however, in some cases alterations have been made to the interviewer's notation for the sake of clarity.

II. Open-End Responses

Question 7. What (experience or training in career education) was that?

E_1 Group:	Economic workshop; materials that come into the department often have information on career education.
	Former guidance counselor, Jr.-Sr. High School.
	Worked in a program designed to get students summer jobs in their academic field.
	Wrote a pamphlet on the topic of career education for elementary school children.
	Coordinator for cooperative field experience.
	In charge of cooperative education program.
	Working in field.
Business and Industry Group:	Helped Bangor High School faculty in the career education program.
	Attended state and national conferences in Augusta and Houston. Read material on career education. Career planning overlap. On cooperative education advisory committee.
	Worked with Professor Ryan on Bangor Project (similar to South Portland Project)--purpose was to orient faculty to career education.
E_2 Group:	Involved in federal manpower program, dealing with college graduates who couldn't find jobs.
	Taking advantage of and finding out about career education on my own.
	Did a film-strip for Charlie Ryan on career education and did a lot of research.
	Student advising.
	Worked in two-year technical program with on the job training. Help administer these jobs.
	Studying, reading, and interviewing.
	M.S. in counseling.

Question 10. What made the "most useful" presentation especially effective?

E_1 Group:

Ability of speaker to relate to group, and my own personal interest. (Quaranta)

Practical, concrete suggestions; good handouts. (Quaranta)

Novel ideas, very innovative. (Feifer/Kleinberg)

Fellow from Michigan who talked about child development through college.

It was the most informative session. (Quaranta)

It jolted me down to earth; it was relevant, easy to associate with. (Ristau)

People of various fields and occupations gave good ideas and insights. (Ryan)

Speaker was good, and the topic was interesting. (Casella)

Liked the idea of total cooperative education. (Feifer/Kleinberg)

Limited number of concepts; clearly presented; applicable and practical. (Casella)

Material presented made it most effective; gave ideas how career education might be used here in Maine. (Ristau)

Presentation got down to "nuts and bolts" of experiences; dealt with motivation. (Feifer/Kleinberg)

Method and content of presentation was good. (Casella)

Genuine sincerity of the speaker; used example approach and made it work. Don Casella was really best.

Speakers involved were very practical and down to earth. (Feifer/Kleinberg)

Good example of putting into play group dynamics. (Quaranta)

Most material could be incorporated in deployment of advising and classroom programs. (Feifer/Kleinberg)

Business and Industry Group:

Use of role and game playing to see how theories square with reality. (Feifer/Kleinberg)

Small but well selected panel of participants and differing scope of ideas. (Ryan)

Question 10 continued.

He (#6) did good job--quite a bit of experience in relating qualifications of school to actual work world. (Quaranta)

Was present full time period of that session; had opportunity to talk with faculty people--they were unaware of materials I had available. (Casella)

Program had successful level--their long-term experience in developing a career education program made it interesting. Got support from the top down; interweaving of faculty-students. (Feifer/Kleinberg)

General applicability of works and self-awareness. (Quaranta)

Talked with Anne Pooler of job and university responsibilities (workshop good). (Casella)

Question 12. What made the "least useful" presentation ineffective?

E_1 Group:

Speaker had difficulty relating to our own situation.

Did not attend those two sessions.

Nothing presented was practical; not readily applicable.

Session with people outside the university (Agway, Bank) who gave their views.

Presentation involved a college community not related to this area; it was not of interest to me.

I was already familiar with the topic; it was all repetition.

Nothing earthshaking; it was mostly common sense.

Had a great deal of trouble linking the concepts to my field.

Concept was fine but presentation lacked luster; someone else should have done it.

Speaker was not well prepared (2).

It was a good presentation, but not applicable to what we have here. I have very little to do with two-year students. (Feifer/Kleinberg)

Didn't say anything; "bullshit session"; lack of content.

Question 12 continued.

Didn't care for individual, he was selling a product.

Boring; he really didn't say anything; no points made.

I don't have any interest or faith in what they're doing.

Wasn't applicable to his field (2).

Business and Industry Group: Not particularly effective; I'm familiar with program; repetitious.

Ristau made no impression on me; rather have heard from Casella dealing with small school, psychological aspects; not especially effective for me.

Too deep for me.

Didn't apply to my field.

Question 13. Which topics should be deleted?

E_1 Group: Introduction to career education in post-secondary institutions. (Ryan)

Infusing career education instructional units. (Ristau) (2)

Career education ideas for two year programs. (Feifer/Kleinberg)

A conceptual model for career education at the university level. (Quaranta)

None should be deleted. (3)

Had difficulty seeing them as specific topics. Number 4 was weak, perhaps needs different speaker. (Career education in the Liberal Arts College - Behring)

Two introductory sessions should be reduced to one.

In general there was too much repetition; too many vague concepts rather than specific applications.

Ideas for two-year programs (Feifer/Kleinberg) and freshman early experience (Ryan/Nichols)

Infusing and organizing. (Ristau and Casella)

Question 13 continued.

Business and Industry Group: Career education in the Liberal Arts College. (Behring)

Repetition in first (3) seminars; should be combined.

None should be deleted.

Question 14. Topics which should have been included.

E_1 Group: Need an introduction which deals in terminology; need to put theories into educator's language.

Information on job hunting, particularly federal and state jobs; handout resources.

Resources available to various disciplines.

More time on helping the student know himself, or herself.

Should be broken into groups with similar interests, and have speakers speak on specific topics.

Presentation on Freshmen Early Experience Program should be generalized more, rather than directed solely to "education."

Would have liked more applicability to university setting.

More on unit development. (2)

Should be geared to science and professional programs.

Session on how we should go about using career education in our program not enough. Not specific enough.

Business and Industry Group: None, did a fine job.

One agenda from employers to present items and problems basic to them.

Student speakers from (a) graduated (b) graduate level (c) undergraduate; what they feel about their careers, future, etc.

Basic discussion on career development and how they change. Seemed to be oriented to how you are going to be an engineer or teacher and there is such a range of things that the teachers may not be aware of; some discussion points weren't touched on.

Student involvement and participation.

Question 16. How could this be improved?

E_1 Group:

Focus wasn't as sharp as it should have been.

First part was already known to professors (repetition may have made it seem that way).

Question 18. What needs were best met?

E_1 Group:

Gave an introduction to the topic; how to analyze problems; how to tackle the problems.

Opened my eyes wider to career education and gave me moral support.

Seeing things from the standpoint of the student.

Meeting some of the authorities in the field, getting to know who they are.

Stimulated me to reassess involvement in career education.

Just general information that was needed.

Reinforcement of already held beliefs.

Ideas for things to put into courses.

Confidence that what I'm doing is right.

Became more aware of career education and how it can be used in classroom and lab work; helped in advising.

Opened me up to see that more can be done; reinforced things I've done with career education.

Was looking for material to make my advising more useful to kids.

Business and Industry Group:

Business community observed and learned problems facing professors. (3)

Developing perception of not only my own career, but developing ideas to help employees develop their career.

Getting to know people from business and university groups.

Question 19. What needs were not met?

E_1 Group: My field is already practically oriented; different needs than those whom sessions were directed at.

Business and Industry Group: I was supposed to be resource person to faculty, but couldn't make the contribution I would have liked to; never consulted faculty on production of program.

Question 21. How (did your attitude change as a result of the sessions)?

E_1 Group: Strengthened my belief in career education; gave me a better understanding of career education.

I became more aware of the way I could introduce career education in my courses.

Changed to have more obligation to the students.

Made me more conscious of improving career education goals.

I'm more convinced we should have formal career exploration for freshmen.

Gained confidence in what we're doing here; more formal "flavor" to things done before.

Felt more comfortable doing things with career education; can draw on information from seminars.

More emphasis will be given to certain areas of courses.

Business and Industry Group: Became more positive; always felt there should be more career education at University of Maine at Orono.

Clear perception of my own career and its development.

More aware of students problems coming into business world; importance of experience.

Question 22. Who or what had the greatest influence?

E_1 Group:

Faculty who participated.

The sessions overall.

In general.

The discussions

Don Casella.

Interaction with businessmen and faculty at lunch.

Business and Industry Group:

Jeff Kleinberg.

Anne Pooler.

Don Casella.

Question 24. In what areas and from whom did you gain essential information?

E_1 Group:

Need for communication between people. (Quaranta)

Resource material. (All speakers)

Career phases. (Quaranta)

Values as opposed to technical skills. (Casella) (2)

Helped generate thoughts for giving students exposure to specific disciplines. (Feifer and Kleinberg)

College level students often have no career awareness. (Behring)

Recognition that career education belongs in all of university rather than just education.

Made me aware of perceptual problems students have in career education.

Methodology of disseminating career education.

Self-awareness for students. (Casella)

Introduction of career education in classroom, and techniques. (2) (Kleinberg/Feifer)

Periods of development; awareness. (Ryan) (2)

Question 24 continued.

Doing things in classroom. (Casella)

University level. (Quaranta)

Methods of group dynamics.

Attitude evaluation of students.

Bibliographic material from handouts.

Course work should be evaluated in terms of knowledge skills, values. (Ristau or Casella)

Advising and helping them get jobs. (Ristau and Ryan)

Business and Industry Group: Learned about guiding my employees into jobs.

Education and engineering faculty pressure to research and publish negative to teaching role. Primary mission is to teach; recognition of this needed.

Constant problems with intercommunication with colleagues. (Ryan)

Emphasis or patron service. (Anne Pooler)

Development process. (Ryan)

Introduction of career education in classroom. (Feifer/Kleinberg)

Question 26. What skills, and from whom?

E_1 Group: More inclined to be aware of needs of students.

Techniques for eliciting career education discussion. (Casella)

Career education process. (From everybody)

Being more comfortable advising, etc.

Understanding the process the student goes thru. (Feifer/Kleinberg)

Business and Industry Group: Made me aware of helping young people get launched properly.

Question 26 continued.

To know expectations and interests of applicants to our industry.

Let me be more at ease with faculty.

Value clarification and definition of work.

Better relations with university people who do our research; personal contact with them important.

Question 28. What were these problems or help?

Helps

E_1 Group: How to approach students' needs.

Solidified thinking on career education.

Supported already held beliefs.

Business and Industry Group: Understanding theories.

Problems

E_1 Group: Found it difficult to get to the meetings at that time.

What will I leave out of my course in order to infuse career education concepts.

Lack of time.

I had a class on Friday morning.

Not having adequate resources available.

Question 30. What are the significant issues you weren't aware of before?

E_1 Group: We live in an affluent society and there's a growing interest of adults in school and education.

The university does not do enough career development work.

I developed certain negative attitudes about career education.

Question 30 continued.

Realization that even elementary teachers have to work in career education not only secondary.

I'm more sure of what the issues are; more aware of statistical information concerning career education.

We need to have students examine the reasons why they are in a particular program.

More aware of career education in nonvocational courses.

Importance of students being made aware of having to train themselves to get a job.

Aware of career education program across the country, now.

Help students explore careers, tests available (career interest). Materials available.

Aware of career education and won't teach another course without incorporating it into course.

Attitudes towards certain things we have to attack; attitudes of professionals and students here at our school.

Business and Industry Group: Important role of career education in post secondary education.

Believe it's ridiculous that these educator's structures have the need for career education to be infused into program; I thought career education would be a way of life. University structure is ridiculous; Ivory Tower thing too true.

Need for career education course (2 hour credit) for freshmen.

Problems of the professors finding time and methods of presenting career education.

Aware now of students problems and their need to be flexible in job area.

More aware of legislative issues pertaining to career education in public education; direct correlation between the pursuit of college education and career placement.

Question 30 continued.

E_2 Group:

Attitudes of both professionals and students here at our school.

Wasn't aware of government funding or organized activity in this area.

Career education as training for life rather than just for a job.

Need to get career education into my teaching.

Mid-life identity crisis.

Aware of people working on and trying to infuse career education in traditional classrooms, but didn't know anyone was getting grant money for it.

Made me aware of broader range of career education in chemistry. Some biases in higher processes.

Absolute confusion of definition of career education in this country; no definitive guidelines.

Concept of job enjoyment as opposed to "job doing."

Question 32. Could you state your reasons why you would recommend/not recommend the seminar series/self study process?

I. Would Recommend Seminars

E_1 Group:

Yes, with reservations. I felt it was too general to make transition.

The representatives in the seminar series dealt with career education in their respective areas.

First thing to do is educate faculty. Alternative (to seminars) might be a 2 or 3 day retreat.

Can interact with other faculty and get involved together.

You're getting together with colleagues dealing with a concentrated topic.

A good way to get people discussing aspects of career education.

Gets people together talking about a specific subject matter; group process is beneficial.

Question 32 continued.

Seminars are a step in the right direction, there now exists a vacuum in the area.

Heightens awareness. (2)

Here are faculty who would benefit by being forced to apply their academic discipline to the "real world."

Faculty has to be aware of career education and accept it, and then administration has to fund it.

When opportunity comes, I will feel more comfortable advising and teaching my students about career education because of reinforcement given to me.

It's the only way it will get done.

Series designed to infuse concepts into education and did this.

Business and Industry Group: Good format for hard sciences; more attention should be focused on arts and sciences.

There is an obvious need, as career education should be way of life at University.

Need for some type of program to alert faculty to aid students in this area. As a group, different ideas can be hashed out.

Discussions seemed to be real enthusiasm on part of faculty; career education concepts new notion to them.

Good in discussion aspect.

Good level of inquiry; searching for methods by staff.

Gets university and business together for workshops and discussions.

There's a direct correlation between higher education and career education because of the mixture of people bringing information to seminar.

II. Would NOT Recommend Seminars

E_1 Group: Seminars will not help the actual infusion of career education.

Topics weren't pertinent to area; wasted time.

Question 32 continued.

III. Would Recommend Self-Study Process

E_2 Group:

Any means that brings the problem to the attention of instructors is viable.

Comes naturally to some people· haven't been convinced that much else is any better.

Every course should have objectives of skills and knowledge. Self-study reinforced my ideas and teachings.

Like to study things myself, rather than being told.

That's all that is necessary and its the cheapest way.

But you have to have the right kind of person for this type of program; one with discipline and interest.

Given me new insights into my own career.

If materials were available it would be more efficient than workshop or training sessions of some other kind.

Students could see the spin-offs of the career education training in my teaching.

For post-secondary people there is no one to teach how to teach; everyone should use self-teach process.

IV. Would NOT Recommend Self-Study Process

E_2 Group:

Education should not be undertaken for the direct purpose of a specific career.

I need something to pace me because other things get higher priority. (2)

From their point of view what happens is career guidance--heading a student in the right direction. My idea is helping after student found career and help them in their own chosen direction. Not asked by student if he should get into engineering, he already knows that's what he wants.

Idea of presenting faculty with a monograph and no opportunity to discuss with colleagues. Need seminars and feedback and opportunity to share resources.

In order to do what one needs, need more guidance at beginning. Talked to Sutton about this.

Only way to infuse career education is when administration gives it status in promotion and pay considerations.

Question 34A. Why would you say you feel more positive, negative or unchanged?

I. Positive

E_1 Group:

When career education was presented to students, they responded positively.

Now making an effort to expose students to job potentials existing in discipline.

Interested in seeing young people get into a career.

Brought a lot of fragments together.

Contact with other colleagues.

It emphasized a need in post-secondary education for career education.

Reinforced the importance of discussions in career education concepts.

I understand the importance of it now.

Gained confidence in what we're doing; pride in job; I came from industry.

Reinforcement of things I've already done in career education.

Just more aware of things. Where there is or is not a problem. Real need in my school: liberal art curriculum.

Wasn't aware of career education as objective in classroom until now.

My idea of career education was preparing student for his particular career and foresee the situations he might get into.

I've had many of the same philosophies that were discussed previously.

More aware through monograph and tuning into it.

Dealt more directly with students and they found it useful (career education concepts I used).

Business and Industry Group:

Career education concepts have real place in classroom; education process.

Career education should be way of life at University.

Question 34A continued.

100 percent pro career education.

Very positive already.

Reinforced.

Development of my understanding University's interest in orienting people to work.

I had no idea about career education.

People that shared their experiences; dialogues that were established should have carried over in teaching and jobs.

E_2 Group: I'm more hopeful seeing there is concern for this area.

I made it a point to work at it.

Elements of career education that I wasn't aware of.

For me, the experiment didn't do anything; brought nothing new to me.

Made me more aware of career education in general.

Realize what the mess is now (lack of definitions and guidelines). I would try to develop guidelines that make sense by using what I've read and discussions I've had with those in the program. Broadens my horizons.

More consciously injecting career education into my classes.

II. Negative

E_2 Group: If students direct their training to one area they will be too narrow in knowledge.

III. Unchanged

E_1 Group: Positive: problem solving approach. Negative: seminars were inefficient in use of time, too much time spent getting ideas across.

E_2 Group: Always has been positive.

Career education has always been important as a goal.

Have always dealt with career oriented programs.

Question 34A continued.

Already aware of career education.

Felt there was a need, even before series.

Nothing swayed me that I read. Nothing influences my already held beliefs.

Didn't get anything out of the seminar to cause it to go one way or the other.

Already committed to career education as I understand it.

Engineering already career education oriented and doing what it's supposed to.

Question 36. Why don't you feel the sessions should be continued for others?

E_1 Group: If for specific disciplines, yes, but not set up as it was.

Question 62. What other materials would have been helpful?

Business and Industry Group: Biography of presentors' backgrounds and accomplishments.

Question 64. What needs were best met?

E_2 Group: Awakened me to some ideas I hadn't been exposed to.

Group discussion, but we need more than talk.

Disappointed that at first they seemed interested in helping with our particular problems, but didn't come away with a meaningful experience; perhaps by reviewing logs ahead of time would have been beneficial in the sense that I learned in limited way from that the thrust of career education.

Reinforcement of what I've already been doing.

Learned what was going on in career education.

Opportunity to interact with peers under same circumstances; not really sure about my needs. Very beneficial.

Question 65. What needs weren't met?

E_2 Group: I didn't feel I had any needs in the area. I felt I was the one to contribute rather than the study teaching me anything.

Question 65 continued.

I'm still not sure what is meant by "career education." (2)

Don't feel as though I had a thorough understanding of career education, the end of it.

Like to have gotten into evaluation process of career education. More implementation of this.

An additional, earlier meeting to get survey of career education would have been helpful.

Helpful information came too late; no control group after the fact.

I wanted to get more out of goals behind career education.

Insight into career education program of other disciplines.

Question 71. What other topics should have been covered by workshop?

E_2 Group:

Followup to process.

Definition of career education.

Application of knowledge to practical experience.

Examples of how people have infused career education into other kinds of courses.

Specific discussion on things people did and their effectiveness and if they meet objectives of career education people.

Should have had evaluation of experiments; without a discussion of the experiments the experiments themselves are a waste of time.

Evaluation process of career education.

Discussion of projects; more depth into reactions.

Mid-life academic crisis.

What career education is supposed to be for engineers; I came away confused.

What is unique or new in career education.

What do you do after the fact? Need more time to process what we did and discuss.

Question 71 continued.

Would liked to have gotten more information on career education resources.

Would like to see some type of emphasis on each particular discipline.

Question 79. What more was needed for a sufficient description?

E_2 Group: The "Guidelines" handout was a little confusing, requirements in the course weren't clear.

Gave no clue to the magnitude or intensity of what I was supposed to do; had to call up and ask about evidence statement.

Better description of first how extensive a trial was expected.

Question 89. What facilities for the seminar series were not adequate?

E_1 Group: Insufficient room, not big enough.

Room too large; bad acoustics.

Question 104. Why did you decide to become involved in the career education project?

E_1 Group: I was in my first year at the university and wanted to be more exposed to details of my profession.

In my field there are too many people and not enough jobs; wanted to help students.

I'm a freshmen advisor, so I have an interest.

To improve skills and get a better idea of what career education is about.

$200 payment.

It was an area I needed to improve in, a part of my professional development .

Was invited and had an interest.

Question 104 continued.

I realize the importance of career education, and it was an administrative duty.

To get more information on the subject.

Thought someone from my department should attend, and no one else volunteered.

I was asked to do it. I thought I might get some ideas.

My discipline is career oriented.

Because I am an advisor.

We have problems advising students.

I teach career oriented students in a career oriented program; am advisor for 2 + 2 program.

Involved in cooperative education program; thought I could learn more.

Strong suggestion by the Dean; interested anyway.

Business and Industry Group: Interested in career education concept.

Have great respect for Dr. Ryan.

Personal invitation from one of sponsors.

I'm convinced having raised kids and working with University that great many students are making blind choices; more faculty-student communication.

An as employer and interviewer, I was interested in how the University was approaching the concept of career.

I asked to attend and did so willingly.

I was asked to attend and felt a lack of understanding in career education.

E_2 Group: I think its essential to education in general.

The student is my prime interest; believe in doing everything for young people.

Wanted to find out if I could learn something.

Question 104 continued.

Knew people involved with career education; knew they needed participants; was interested.

Jack Sutton drafted me.

Have been interested in this topic for years and have used it in classroom and was interested in what program was about.

Seems related to my field and teaching.

So I could see how my ideas stood up to professionals; reinforcement and improvement from professionals.

Self-knowledge.

Money; wanted to find out what was going on in education specifically career education.

Professional growth; possible publication, stipend.

Consider myself already in career education and curious to see what someone else had to say about it.

My basic interest in career education; it's a worthwhile topic to pursue.

My commitment to education.

My interest in career education and hope to learn something useful.

I had been conscious of the need for career education for my students. They brought the idea to me.

$200 stipend. (2)

Question 106. How was the information you received about the program inaccurate?

E_1 Group: Too general; would have liked it a little more specific.

What we were supposed to learn from the series was not explicit; materials too scanty.

Not inaccurate, just not detailed enough. (2)

Business and Industry Group: Didn't realize exactly what my role was to be; thought I'd be more of a resource person.

Question 106 continued.

E_2 Group:

Should have provided a reading list; a better idea of what was expected of us.

Information was not complete (which may be the nature of the program).

Not so much inaccurate, still not sure what Ryan and his group were trying to get across; not very informative.

Thought there would be more contact with leaders even though it was self-study.

Never clear what was expected in terms of depth and still true after project.

Need more detail.

Question 113. What other factors, if any, entered into your decision to participate?

E_1 Group:

I was relatively new here, thought the series would be a good way to quickly get into the system and see what was happening.

Helpful in advising role.

Curiosity as to what career education is all about.

A personal invitation from one of the sponsors. (2)

Wanted to hear what the professionals had to say about it; even though I had my own ideas.

Thought I might get something out of it.

Thought I could use it in advising and the classroom; interested in the subject.

Business and Industry Group:

Just interested in the program.

Possible correlation with high school guidance work that I was involved with.

Urged to by company.

A personal invitation.

Question 106 continued.

E_2 Group: I like to feel we're doing a good job in career education in this department.

Just like to know something about it.

Jack Sutton's request that he needed someone else to fill out a group.

Have been doing things with career education orientation, but wanted to know what professionals were doing; wanted to know more about evaluation process.

Wanted to get into E_1 group, but was filled so took E_2--better than nothing.

Professional curiosity. (2)

Possible publication; need for update on current career education; I'm involved in government funded program and wanted to see how other government programs were run.

Interest in the student and his present and future well-being.

Request from students.

Question 133. What were the problems encountered when field testing a career education concept in one of your courses?

E_2 Group: Interferred with a normal presentation of a course when I thought the normal way was better.

In training people who were going to run the program.

Question 136. What were the results of the evaluation?

E_2 Group: Students identified things that did help them.

Mostly favorable.

Very positive.

Students liked it.

One-half of the class thought it was about careers and one-half thought it was education for a career. Most of the class is in Chemical Engineering and they hear plenty for specific careers, but a surprising amount wanted to hear more about careers in general. All Jrs. and Srs.

Generally positive; not a formal evaluation.

Question 140. What concepts have you infused in your student advising role?

E_1 Group:

Relation of job objectives with personal characteristics in an informal way.

Encourage minor areas of study so they will be more adaptable to various areas of job placement.

Try to give kids an idea of things available; other disciplines, etc.

Career exploration; what goes on in each area; development of the student after graduation.

Helping students select electives as alternative career opportunities.

Discussion of career opportunities; make student more familiar with field.

Exploration of why a student is studying what he is studying.

Self awareness and job awareness.

Keep student aware of application of courses to whatever he's interested in.

In advising role, make sure student is aware of job market and aware of other courses for preparation for second job.

Before series making students aware of job requirements; encourage to join professional organizations and listen to guest lecturers and get summer employment in forestry.

Same as before.

Learning career exploration; body of material available for interest testing.

Advising students of courses that will be helpful to their endeavor.

Too early to say; worked some concepts into advising only, so far.

E_2 Group:

Self awareness.

All lab courses have specific aims, the subject is the most important aspect of education.

Identification of types of careers best prepared for by different departments.

Question 140 continued.

Prepare them for a job at the graduate level.

General awareness of job opportunities and what's ahead for them.

Helping students to look at alternatives to typical roles.

Explanation of other career education concepts other than classroom teaching.

Try to develop his program for a career as an engineer.

Encouraged master students to branch out options.

Urged discussion with people in career education profession (but not a result of self-study).

Make students aware of the other opportunities in chemistry.

Not as a consequence of this exercise; been doing it. Use description of my experiences, i.e., pay-scale, expectations of job, and family harmony.

Description of types of work people in our program get into.

Question 143. How do you intend to accomplish the pursuit of career education on your own?

E_1 Group:

Trial and error.

Gradual change of attitudes.

Have sent away for resource material.

Would like additional seminars; would like to receive material from our Career Development Center.

I will work in an economic education workshop this summer.

Has attended at math convention and career education discussions.

Developing an introductory course concerning careers in my particular field.

Formally integrate into classes.

Use the unit for freshmen to get students to examine reasons for being in program.

Question 143 continued.

Informal infusion of concepts into courses. (2)

Reading resource materials and using career placement on campus.

Student advising and infusing of career education concepts.

Infusing career education concepts into my freshman seminar series. Like to read material from course that I haven't read.

More reading.

E_2 Group: Through advising role.

Keeping alert and taking advantage of opportunities.

Developing knowledge, skills, values, attitudes among students.

Free time reading.

Independent reading.

Continue experimenting with career education methods I currently use; intend to find out more of professional career education perspective, which I'm not sure, but don't think I agree with.

Infusing career education through advising and in classes.

Being aware of literature related to career education and special education.

Continue and refine what I've been doing and set up course at sophomore level to increase student awareness.

By examining my own providence against those demanded by my present career.

Would see career education infused into program under my leadership.

Ask for suggestions from career education pros and invite guest lecturers.

Integrating extra reading into courses with wide biological interest; makes students more aware of what's outside of course. And, scattered lectures having application to career education topics.

Question 143 continued.

In our curriculum have seminar geared to Jr. and Sr. with main emphasis on career education and I will be involved in this course's contents.

Way I have in past--basically, acquainting the student with professionals in the business, their work, and life styles.

Classroom discussions and lectures.

Question 146, 148. What literature have you read as a result of sessions?

E_1 Group:

Biology Teacher--Career.

Journal of Education.

Journal of Sociology.

Material given out at sessions. (2)

Handouts given out at math convention.

A paper dealing with goals in careers.

A few chapters in a book.

Studies on career education.

Machine design article in Engineering Education.

Question 151. What ideas, materials, or skills if any, do you use now as a result of the career education project?

E_1 Group:

Materials regarding personal inventory analysis.

I'm more aware of career education now and I try to get across it's ideas to my students/colleagues.

I'm now aware that I must supply this dimension to education.

Take more time to explain to students variety of positions in the job market.

A number of self-awareness exercises.

Don't know, too early to answer, maybe next year. (2)

Attitude of students; need a critical examination of why they want to do this kind of work.

Question 151 continued.

The unit--will use it to incorporate career education.

None this semester, but will start; may use to help graduating students find jobs.

Making students realize who they are.

Career attitude development in students. (2)

Learning objectives.

Advising people to get more into their personalities and examine it; their endeavor is reflective of personality.

E_2 Group:

I've become a little sharper in applying concepts.

Importance of career alternative and training for handicapped.

Necessity in advising students.

Sex role stereo-typing problem.

Idea of seminar mentioned.

Books and guest speakers.

Need for strong training component for anyone working with career education.

Career education is not something you read booklet for and then do.

Job enjoyment, work appreciation.

III. Miscellaneous Respondent Comments

Question 13. Which topics should be deleted from future series?

Different fields need different subjects stressed; can't say.

Question 17. Did the sessions meet your needs?

Don't know if needs were met, have to try to apply it.

Don't know what my needs are--my role is to provide input.

Question 29. As a result of the self-study process are you now aware of any significant issues you weren't aware of before?

The self-study process just reinforced already held beliefs.

Question 33. Did the self-study process provide you with a well-integrated body of knowledge?

No, but this was probably my own fault.

Question 35. Should the seminar sessions be continued for others?

No, there should be an implementation program at a pilot college, then transferred to others.

Not recommended for everyone, some believe in education for education's sake.

Question 37. Do you feel there was too much "overlap" between sessions?

Topic matter wasn't overlapped but each speaker wanted to go over who we were and why we were there. It would have been better if we could have given each one a paragraph about ourselves.

Question 43. . . . should representatives of the business and labor communities be included. . .as participants as speakers, as both. . .or should they not be included?

Both, bring in people from industry who screen job applicants.

Question 46. Were the consultants sufficiently aware of or sensitive to local situations or problems?

No, but they weren't insensitive either; it didn't affect the sessions adversely. (2)

Question 72. Was the format of a single, day-long workshop convenient for you, or would 2 or 3 shorter workshops have been more convenient?

Nothing is convenient at this time of year.

Question 84. How about the time interval between sessions?

One a week for three weeks, then a two week break, then three more in three weeks.

Would like them spaced more evenly--every other Friday.

Continuity was lost; 4-5 days together would be better.

Question 90. Was the luncheon following each session beneficial?

Yes, almost as good as the sessions. The group in the sessions was too big to get discussion going.

Question 115. Would you have participated had there been no stipend?

May have skipped more, but participated, had there been no stipend.

Question 152. Should career education have an expanded role in higher education?

No, shouldn't create a monster out of it.

No, career education needs a role, but not necessarily an expanded role.

Career education is the basis for our entire educational concept.